

# O'Hare Subregion Truck Routing and Infrastructure Plan

*Proposed Truck Route Network*

## technical memorandum

*prepared for*

**Chicago Metropolitan Agency for Planning**

*prepared by*

**Cambridge Systematics, Inc.**

*with*

**Sam Schwartz Engineering**



*report*

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115 South LaSalle Street, Suite 2200  
Chicago, IL 60603

*with*

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*Date*

**June 30, 2017**

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## 1.0 Overview

The Chicago O'Hare International Airport Subregion is a diverse and vibrant set of communities northwest of Chicago. Home to a range of manufacturing, logistics, and other freight-related businesses, this area serves as an economic engine for the region, state, and nation. Although the transportation and logistics centerpieces for this region are the busy airport and intermodal hubs, underlying this is the vital support of the regional highways and streets that connect suppliers, customers, warehouses, and transportation hubs through the thousands of trucks that travel through the region on a daily basis. While absolutely critical to the region's economy, the high level of truck traffic also poses problems. As in many communities, it is a challenge to handle high and growing levels of truck activity, make the necessary infrastructure investments, and coordinate policy and investments in a way that protects the community while supporting economic needs.

To meet some of these challenges, the Chicago Metropolitan Agency for Planning (CMAP) is coordinating the O'Hare Subregion Truck Routing and Infrastructure Plan (Plan) on behalf of 11 municipalities who applied for Local Technical Assistance funding in 2014. The participating municipalities are: Bellwood, Bensenville, Des Plaines, Elk Grove Village, Franklin Park, Itasca, Maywood, Melrose Park, Northlake, Schiller Park, and Wood Dale. This Plan will provide a framework for coordinated local decision-making and regional investment by identifying an effective and integrated truck route network and priority project needs.

This document is a technical memorandum documenting the creation of the Proposed Truck Route Network. The document incorporates information from an analysis of existing conditions and stakeholder input, provides a conceptual framework for classification of truck routes, and identifies corresponding roadways in the region. Four roadway categories (Levels A-D) were developed as part of this process. Three levels are used to separate differing truck use, volumes, and need for truck related investment, while the fourth level describes roadways not intended for use by trucks. Additional documentation in this memorandum includes a discussion of future infrastructure projects that could change truck travel patterns and identification of overarching opportunities and barriers associated with developing truck routes, including an analysis of local truck restrictions that conflict with the Proposed Truck Route Network.

This technical memorandum is organized as follows:

- **Section 1** – Provides an overview of the proposed truck route designation and this document;
- **Section 2** – Describes the conceptual framework for developing proposed truck routes and identifies the Proposed Truck Route Network;
- **Section 3** – Discusses the stakeholder outreach process and input into the Proposed Truck Route Network;
- **Section 4** – Identifies potential changes to the network that would occur under various future scenarios based on infrastructure changes in the region; and
- **Section 5** – Highlights barriers and opportunities including known conflicts with policy/regulations and a high-level overview of infrastructure needs. Potential infrastructure projects or policy recommendations to address identified issues will be discussed in the final action plan.

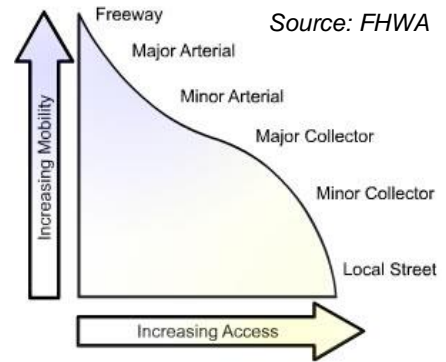




## 2.0 Development of the O'Hare Subregion Proposed Truck Route Network

### 2.1 Truck Route Conceptual Framework

According to the Federal Highway Administration (FHWA), roads serve two primary travel needs, access and mobility. Access refers to the ability to reach (and exit) specific locations. Mobility is the ability to travel through an area.<sup>1</sup> Thought of as a continuum, most roads serve some combination of both goals. This same continuum applies to truck needs—some roads mainly provide through movements (mobility), others allow trucks to reach specific origins and destinations (access), and still others provide minimal benefit for either mobility or access. Identifying which roads serve which purpose was the key objective of this task. Parallel to this concept is the legislative description of “Class” highways in Illinois. Chapter 15 (Size, Weight, Load, and Permits) of the Illinois Vehicle Code governs the legal size, weight, and load of trucks. These limits vary depending on the “Class” of the road. For example, tractor-trailer combinations over 65' in length can only legally travel on Class I or Class II Truck Routes (with some exceptions).<sup>2</sup> State law also allows for local governments to identify “Locally Preferred Truck Routes”, which do not legally permit or restrict truck travel but instead serve an advisory role.



In order to both understand how elements of the highway network address mobility and access as well as how to recommend representing them in Illinois' Class system, roads were classified into one of four levels:

- **Level A Truck Routes:** These high-mobility roads are critical to through truck movements or provide access to high-volume intermodal freight facilities. Truck-related investments should be prioritized, even if passenger improvements are not necessary; roads should be designated as Class I or Class II highways;
- **Level B Truck Routes:** These roads provide both “through” and “local” access for large trucks (53' trailers), including first/last mile connections. Truck-related investments should be balanced with passenger and other concerns (such as bike lanes and transit). To allow legal access for 53' trailers, these roads should be designated as Class II highways, though in some cases investments or policy changes may be necessary to meet Class II criteria<sup>3</sup>;
- **Level C Truck Routes:** These roads provide local access for small trucks. Larger trucks may gain access off the Class I and II network as allowed by Illinois law.<sup>4</sup> Truck-related investments may be

<sup>1</sup> [https://www.fhwa.dot.gov/planning/processes/statewide/related/highway\\_functional\\_classifications/section02.cfm](https://www.fhwa.dot.gov/planning/processes/statewide/related/highway_functional_classifications/section02.cfm)

<sup>2</sup> <http://www.idot.illinois.gov/Assets/uploads/files/IDOT-Forms/OPER/OPER%20753.pdf>

<sup>3</sup> Class III designated highways may also be appropriate for access to facilities; however movements for longer trucks are more restricted than under the Class II designation.

<sup>4</sup> 625 ILCS 5/15-107. (Summarized) Vehicles over 65' in length may travel one mile off a Class I highway onto any street provided there is no sign prohibiting that access, or five miles off a Class I or Class II highway onto any state or locally designated highway for purposes of loading, unloading, fuel, food, repair, or rest.

considered but not necessarily prioritized. Roads should be identified as Locally Preferred Truck Routes or have no designation; or

- **Level D Roads:** Trucks are strongly discouraged or restricted on these roads and truck access should not be a consideration in investment decisions. These roads should either have no designation, or should have a truck restriction.

Table 2.1 summarizes this truck route designation framework. Roads in each proposed Level are intended to meet certain criteria in regards to designation, road design, and investment. For example, proposed Level A Truck Routes are intended to be designated either Class I or Class II highways. Proposed Level C Truck Routes comprise both state undesignated routes and local routes to be designated as Locally Preferred Truck Routes. The level of truck-related investment and guidelines for making investments vary, with A's receiving the most consideration for truck traffic, and D's having no consideration for truck traffic. Truck routes should be appropriately signed by the controlling agency.<sup>5</sup> To support these investments, guidance from the AASHTO "Green Book"<sup>6</sup> or NACTO street design guides<sup>7</sup> is suggested. Finally, the proposed Level A and B roads should be included on the IDOT website (as part of the Class I or Class II designation process) and should be distributed to system users. Level C routes may be appropriate to include in a truck route map, at the discretion of the local agency.

**Table 2.1 O'Hare Subregion – Truck Route Investment Matrix**

Road Level	Proposed Level A	Proposed Level B	Proposed Level C	Proposed Level D
Designate a Class I Truck Route?	Yes	No	No	No
Designate a Class II Truck Route?	Yes	Yes	No	No
Designate a Locally Preferred Truck Route?	No	No	Maybe (if allowed under IL law)	No
Undesignated Roads and Streets?	No	No	Maybe	Yes
Truck Route Sign?	Yes	Yes	Maybe	No
Truck Restriction?	No	No	Maybe (if allowed under IL law)	Yes
Truck Investment?	Yes (Prioritized)	Yes (Balanced)	Maybe (focus on small trucks)	No
Primary Investment Guidelines	AASHTO	AASHTO	AASHTO/ NACTO	NACTO / AASHTO
Included in a Truck Route Map?	Yes	Yes	Maybe (if allowed under IL law)	No

<sup>5</sup> [625 ILCS 5/15-316\(b\)](#)

<sup>6</sup> American Association of State Highway and Transportation Officials, *A Policy on Geometric Design of Highways and Streets*. (2011). See <https://www.fhwa.dot.gov/design/standards/151112.cfm> for FHWA guidance

<sup>7</sup> <http://nacto.org/publication/urban-street-design-guide/>

## 2.2 Truck Route Roadway Categorization

Roads were categorized based on a number of factors, including current condition,<sup>8</sup> heavy combination vehicle (HCV) volume, lane width, and number of lanes, surrounding land use patterns, network connectivity, and others. These considerations were applied to the roadway network in a top-down approach where roadways meeting Level A criteria were identified first, followed by Level B and Level C, as described in subsequent subsections. Remaining roadways were classified as Level D. Each classification was vetted multiple times by the consultant and CMAP teams to create the proposed Level routes. This initial iteration was then vetted by the policy and technical committees in March, 2017 to create the Proposed Truck Route Network, as described in Section 3.

Note that existing truck restrictions were not considered as part of the initial categorization. This is in part due to the wide variety of causes for truck restrictions, including community considerations or infrastructure challenges that may not directly reflect either access or mobility issues. By not including existing restrictions as part of the initial analysis, it allows this study to identify potential projects and policy recommendations (including removing truck restrictions) that are necessary to create a connected, logical network that allows trucks to perform their critical functions. Excluding roads solely based on current restrictions would nullify this goal. However, during the vetting process, a number of roadway restrictions were considered and used to influence the network on a case by case basis. Truck route restrictions examined are specifically identified in Section 5 of this technical memo.

It is also important to note that this Proposed Truck Route Network document and map does not change the legality of truck route travel in the region. Roadway owning agencies will need to work in conjunction with IDOT to properly designate truck routes as Class I, II, or III in order to allow legal access for trucks over 65' in length (including most 53' trailers). Implementation of this study will create an official truck route network that allows for legal truck traffic and is published on the IDOT website.<sup>9</sup>

## 2.3 Proposed Truck Route Network

The Proposed Truck Route Network is shown in Figure 2.1.<sup>10</sup> The following subsections describe the selection criteria and process for identifying the proposed Level A, B, C, and D Truck Routes. Each subsection shows the initial iteration of the proposed Level A, B, C and D Truck Routes which were combined and modified to create the Proposed Truck Route Network. Additional maps showing some of the criteria used to identify proposed Level A, B, and C routes are found in Appendix A.

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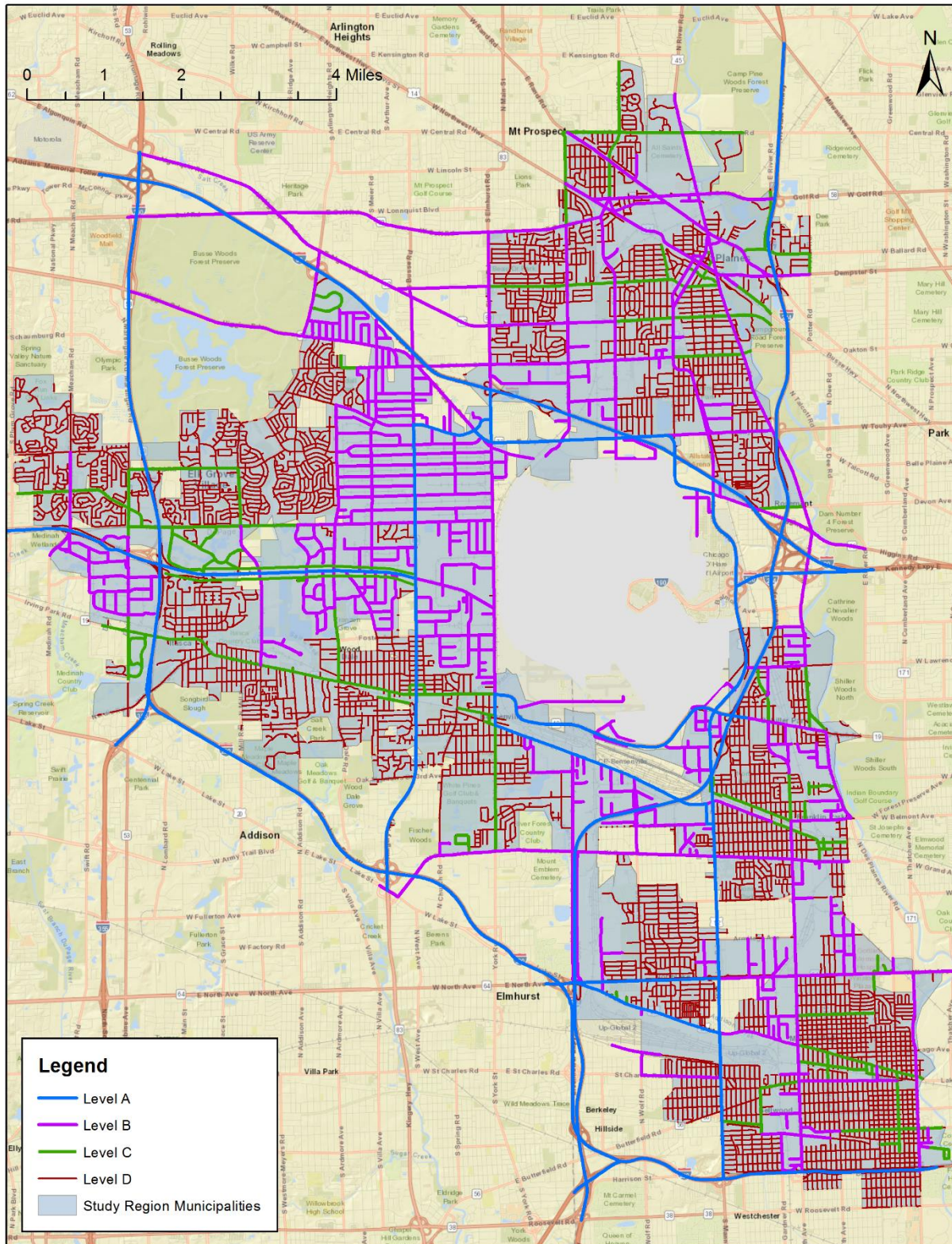
<sup>8</sup> "Current" is defined to include projects that are anticipated to be completed by the end of 2017.

<sup>9</sup> <http://www.gettingaroundillinois.com/gai.htm?mt=dtr>

<sup>10</sup> A high quality image is available with this document on CMAP's website:  
<http://www.cmap.illinois.gov/documents/10180/487146/Proposed+Truck+Route+Network.jpg/8891c2d4-994f-4540-a3da-8ea4990dd3bf?t=1495215195163>



**Figure 2.1 Proposed Truck Route Network in the O'Hare Subregion (including revisions)**



Source: CMAP, IDOT, analysis by Cambridge Systematics, 2017

## 2.4 Level A Truck Routes

This section describes the characteristics of proposed Level A Truck Routes and explains the criteria and process used to select them.

### 2.4.1 Description

Proposed Level A routes comprise the key truck routes in the region. These roads are critical to economic development not only in the O'Hare Subregion, but also within the greater Chicago region as well as nationwide. Proposed Level A roads are intended to have the following characteristics:

- They are critical to through truck movements or provide access to high-volume intermodal freight facilities such as O'Hare Airport or the freight rail intermodal yards in Bensenville and Northlake;
- Roads should be designated as Class I or Class II Truck Routes;
- Non-motorized traffic should be separated from the road behind a curb or other physical barrier;
- Road should be designed with the geometry and functional ability to handle very high truck volumes. The typical design vehicle is WB-67<sup>11</sup> (73' long); and
- Roads should be prioritized by controlling agencies for truck-related investments, even if passenger improvements are not necessary.

### 2.4.2 Criteria and Process

A number of quantitative and qualitative filters were used as screening criteria to identify the proposed Level A Routes. These criteria were not absolute measures—for example, a road lacking heavy commercial vehicle (HCV) volume data might still be classified as a Level A Route based on other factors. Also, although it is not broken out as a specific criteria below, network connectivity to ensure mobility was a key consideration throughout the process. Creating a network without “dead ends” or significant detours that excessively impair a truck’s ability to move in the region helps satisfy the need for a coordinated, integrated truck network as identified in CMAP’s comprehensive plan, GO TO 2040.

Two phases of filtering were used. Stage 1 screening was a “data only” approach that identified an initial Level A network based on available road data. Stage 2 screening modified the initial network based on qualitative factors, land use, and feedback from the project team to create the Proposed Level A Truck Route network.

Note that some additional changes to the proposed Level A network were made during the stakeholder review process. These are described in Section 3.

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<sup>11</sup> American Association of State Highway and Transportation Officials. “A Policy of Geometric Design of Highways and Streets.” Fourth Editions, 2011.



## Stage 1 Screening

### Heavy Combination Vehicle Traffic and Percentage

HCV volume and percent of traffic was the first screening tool applied.<sup>12</sup> A lower limit of 3,000 HCV was used as a screening threshold to identify roads with the highest truck volumes. HCV volume is shown in Figure A.1 in Appendix A. HCV percent was also examined to identify any additional locations where truck volume might be below the 3,000 HCV threshold but constitute a large percent of overall traffic volume. HCV percent is shown in

Figure A.2 in Appendix A.

### Lane Width

Lane widths in the O'Hare study region vary greatly. Illinois statute does not include a lane width requirement for Class I Truck Routes, but does require that Class II Truck Routes have a minimum 11' lane widths.<sup>13</sup> For this initial "data only" identification, roads with 12' or wider lanes were selected. These roads are intended to be the key truck routes in the region with high truck volumes where wider lanes will provide a greater margin of error for truck movements. Road lane widths are shown in

Figure A.3 in Appendix A.

### Number of Lanes

Level A routes generally have multiple lanes as they are intended to move large volumes of vehicular traffic. Additional lanes also provide passing opportunities in corridors with intersections that force trucks to slow down and speed up regularly or allow vehicles to be out of the main flow of traffic in order to make a left turn. Initial selection focused on roads with at least three lanes (one in each direction plus a center-turn lane).

Combining these factors produced the "data only" network that provided a framework, shown in Figure A.5 in Appendix A. Additional considerations in the second round of filtering are described below.



*Proposed Level A Truck Route on IL 83 south of Landmeier Rd. - Elk Grove Village  
Source: Photo by Cambridge Systematics*

## Stage 2 Screening

### NHFN/CUFC

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<sup>12</sup> As noted previously, HCV includes both trucks and buses.

<sup>13</sup> 625 ILCS 5/1-126.1 (a)  
<http://www.ilga.gov/legislation/ilcs/ilcs4.asp?DocName=062500050HCh%2E+1&ActID=1815&ChapterID=49&SeqStart=100000&SeqEnd=32200000>

The next criteria identified roads that are part of the National Highway Freight Network (NHFN), including the proposed draft Critical Urban Freight Corridor (CUFC) network in the region. These roads have already been selected as critical for freight movement and investments on them are eligible for federal FAST Act freight funding. These routes promote both regional mobility and access to some of the largest freight generators in the region including the cargo facilities at O'Hare (Higgins Rd.), CP Bensenville (Franklin St.), and UP Global II (Lake St.). Figure A.6 in Appendix A shows these networks.

### Road Separation from Surrounding Land

Roads that are separated from surrounding land uses via a bridge/viaduct or barriers such as sound walls, berms, tree lines, or other features have less interaction with surrounding land uses. For example, a truck on a viaduct does not have the same level of negative impact on adjacent residential uses as a truck traveling on a road at grade with no separation from adjacent uses. In addition, these roads also avoid other potential conflicts including at-grade rail crossings or intersections. Therefore, these roads are more appropriate for high truck volumes.

### Land Use

Finally, for roads that do not serve a pure mobility need, land use is a key deciding factor. Access to major intermodal freight generators, specifically O'Hare's cargo facilities and the two main intermodal railyards, the Canadian Pacific's (CP) Bensenville facility and the Union Pacific's (UP) Global II facility in Northlake, must be considered. Roads used to reach these locations are anticipated to carry very high truck volumes and are key to the economic viability of the region, justifying the need for truck improvements even if the roads themselves are not multi-lane highways or otherwise not focused on providing truck mobility.

### 2.4.3 Recommendations

The initial iteration of proposed Level A Truck Routes is shown in Figure 2.2 on the following page. This network contains all Interstates in the O'Hare Subregion, critical through routes including portions of IL 83 and U.S. 45/Mannheim Rd., and important local access roads to freight generators including IL 19, Franklin Ave. and U.S. 20/Lake St. It should be noted that some proposed Level A routes that pass out of the study



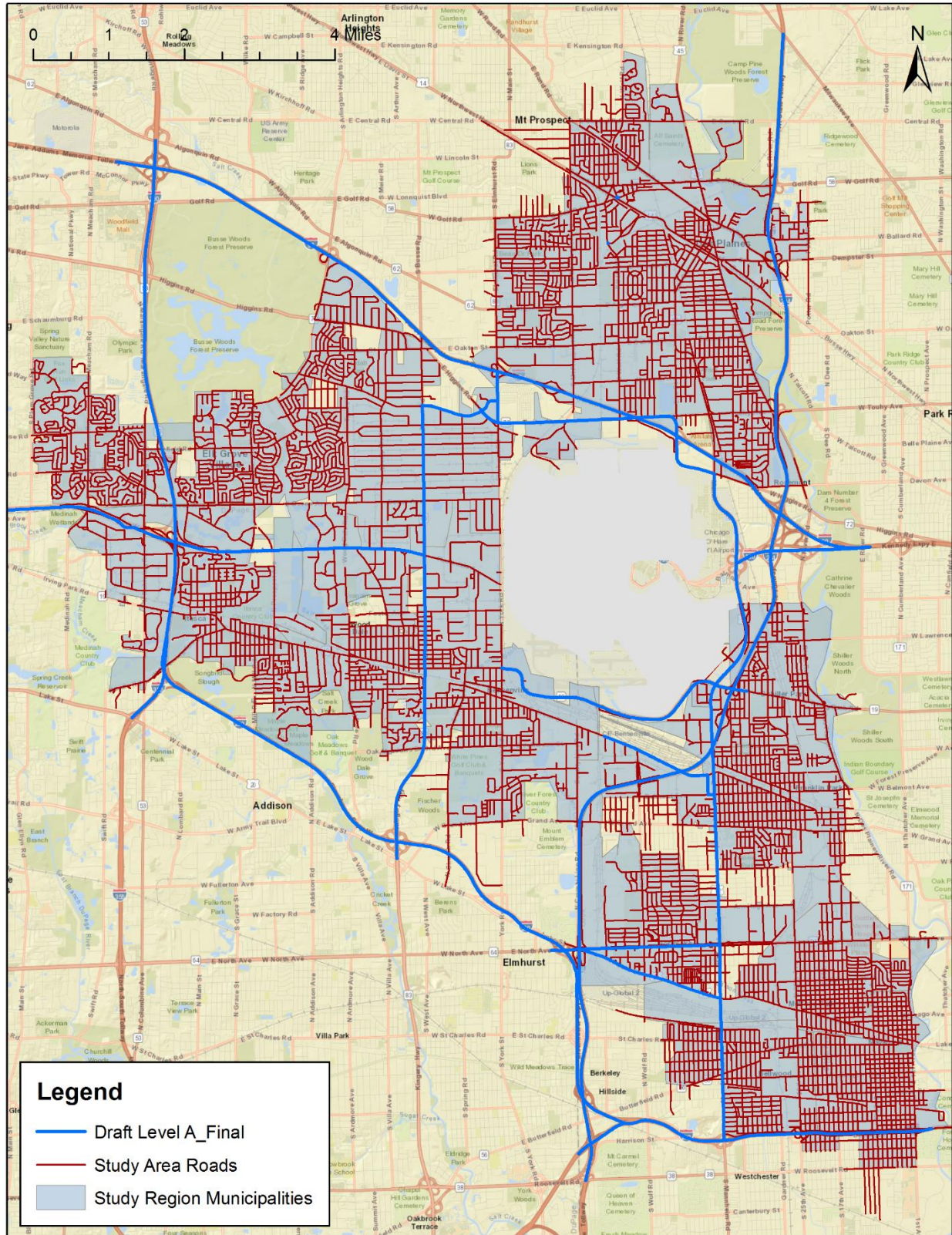
*Proposed Level A Truck Route on IL 19 (Irving Park Road) Connects to O'Hare's South Cargo Area (picture looking east from York Rd. – Bensenville)*

*Source: Photo by Cambridge Systematics*

region municipalities are shown in this map at the behest of stakeholders in order to provide context and illustrate that truck movements do not stop at a municipal border. A similar approach was taken with key proposed Level B routes, discussed in the next section. However, identification of project needs or recommended policy/administrative changes will be limited to roads in the study region.



**Figure 2.2 Initial Proposed Level A Truck Routes in the O'Hare Subregion**



Source: CMAP, IDOT, analysis by Cambridge Systematics, 2017

## 2.5 Level B Truck Routes

This section describes the characteristics of the proposed Level B Truck Routes, explains the criteria and process used to select them, and identifies the initial proposed Level B network. Additional changes to the proposed Level B network were made during the stakeholder review process. These are described in Section 3.

### 2.5.1 Description

Proposed Level B Routes are key through routes and connectors between the regionally-focused proposed Level A network and the businesses that produce and consume freight. These roads:

- Provide both “through” and “local” access for 53’ trailers, including first/last mile connections;
- Balance truck-related investments with passenger and other concerns (e.g. bike lanes);
- Should be designated as a Class II Truck Route to support legal movements of 53’ trailers (in some cases may need infrastructure investment or policy changes to meet Class II highway standards); and
- Have a geometric and functional ability to handle a variation in large-truck volumes, typical design vehicle is WB-67 (73’ long). A “Complete Streets” approach is appropriate using AASHTO designs, with some exceptions.



*Class II Truck Route Sign*

*Source: Photo by  
Cambridge Systematics*

These roads blend the need for mobility and access depending on local circumstances. For example, York/Elmhurst Rd. in Elk Grove Village and Bensenville acts as a north-south “through” route and provides mobility for trucks along the west side of O’Hare Airport. However, it also provides access to local businesses along the corridor as well as connections to multiple smaller roads that reach businesses to the west.

One key consideration is that these Level B roads are intended to be designated as Class II Truck Routes to support legal movement of 53’ trailers. Due to this requirement, roads that provide access to businesses that can reasonably be expected to require a truck with a 53’ trailer should be included in the Level B network. A number of roads qualified for Level B strictly due to the need for access for these longer trailers.

### 2.5.2 Criteria and Process

The following criteria were used in order to select the proposed Level B Truck Route network.

#### Heavy Combination Vehicle Traffic and Percentage

Similar to the proposed Level A network, HCV data provides a starting point for identifying roads already carrying significant amounts of truck traffic. However, since IDOT data only covers State roads (with a few limited exceptions), the majority of local roads could not be selected based on this criteria. Roads with HCV over 500 were included as an initial selection.



## NHFN/CUFC

Any roads that are on the NHFN, including the proposed draft CUFCs, and were not included in the proposed Level A network were selected and included as proposed Level B routes. These roads had already been identified at the national, state, or regional level as key corridors for freight movement and are eligible for federal freight funding.

## Land Use and Connectivity

Land use is the key criteria in identifying proposed Level B Truck Routes. Outside reasonable access limits, any land uses that could reasonably generate or receive a 53' trailer, the national over-the-road standard, should be a Class II Truck Route in order to legally carry those vehicles. For this analysis, all roads meeting



*Proposed Level B Truck Route on a Small Industrial Street  
Providing Access to Industrial and Warehousing Facilities – Elk  
Grove Village*

*Source: Photo by Cambridge Systematics*

these criteria were included in the proposed Level B selection. Land use data provided by CMAP allowed for an initial identification of freight-generating land uses. This data was supplemented by aerial maps and discussions with staff and stakeholders in the region to identify all relevant truck-related land uses. These land uses were then linked to the proposed Level A network as well as internally within the proposed Level B network to create a coordinated system that avoided “dead ends” or roads that were separated and legally inaccessible to large trucks. Freight land uses in the region are shown in Figure A.7 in Appendix A.

## Lane Width

One final consideration is that Class II highways must have a minimum 11' lane width.<sup>14</sup> However, using 11' lane widths as a screening criteria could exclude a large number of the small access roads to industrial areas that based on land use require truck access and routinely carry large truck-trailer combinations. Instead, this study will recommend that where applicable, investments should be undertaken to widen lanes to meet the criteria for designation of these routes as Class II Truck Route.

### 2.5.3 Recommendations

The proposed Level B Truck Routes are shown below in Figure 2.3 along with the proposed Level A Truck Routes in order to show network connectivity. Similarly to the Level A network, proposed Level B routes that pass out of the study region municipalities are shown in this map if they act as a “through” route (e.g. River

<sup>14</sup> 625 ILCS 5/1-126.1 (b)  
<http://www.ilga.gov/legislation/ilcs/ilcs4.asp?DocName=062500050HCh%2E+1&ActID=1815&ChapterID=49&SeqStart=100000&SeqEnd=32200000>

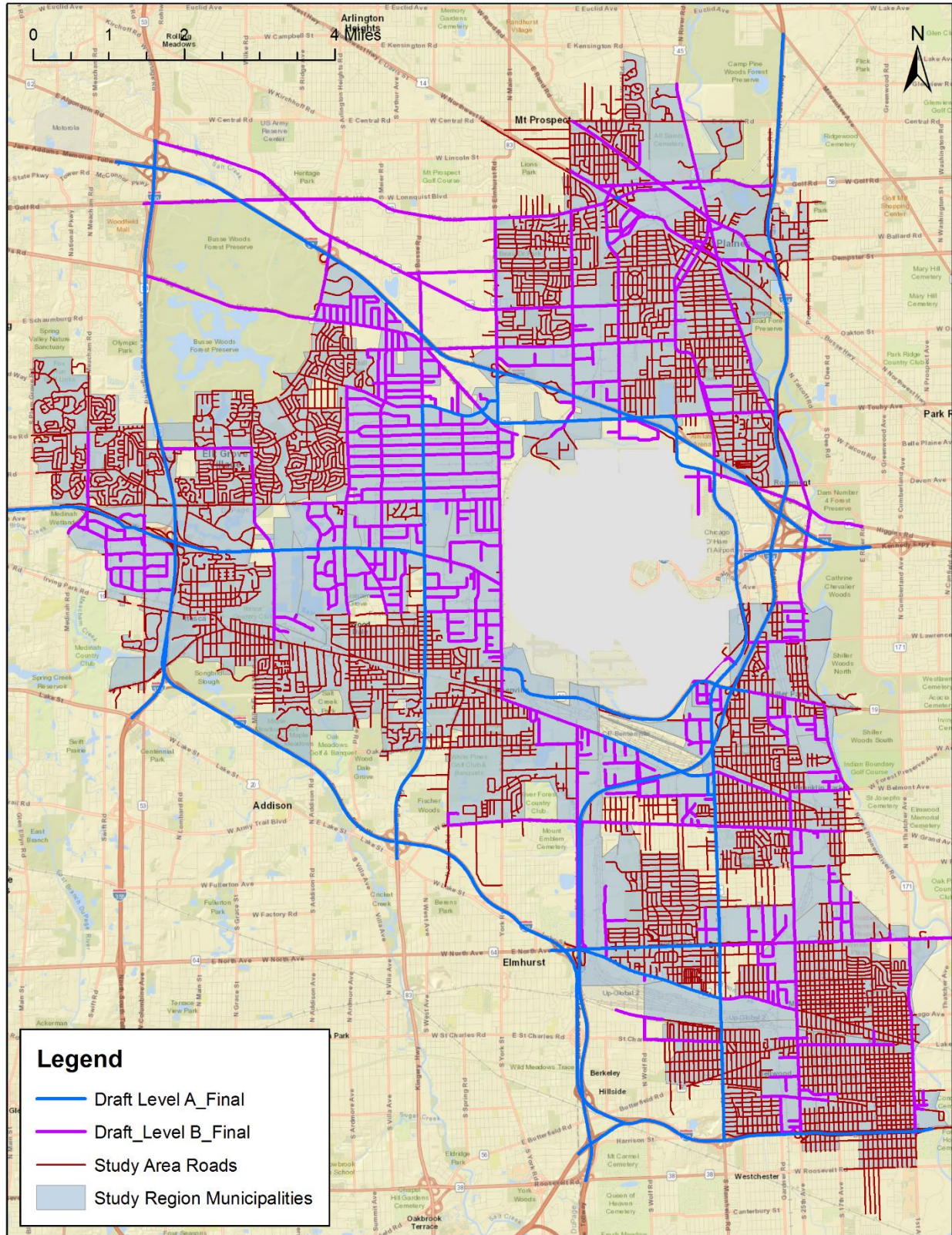
Rd. or Higgins Rd. through Rosemont) or provide access to a key intermodal facility (e.g. N Wolf Rd. and St. Charles Rd. in Berkeley, which provide access to UP Global II).



*Proposed Level B Truck Route on Elmhurst Rd. at Lunt Ave. – Elk Grove Village  
Source: Photo by Cambridge Systematics*



**Figure 2.3 Initial Proposed Level A and B Truck Routes in the O'Hare Subregion**



Source: CMAP, IDOT, analysis by Cambridge Systematics, 2017



## 2.6 Level C Truck Routes

This section describes the characteristics of proposed Level C Truck Routes, explains the criteria and process used to select them, and identifies the proposed initial Level C network. Additional changes identified to the initially identified Level C routes as part of the stakeholder review process are described in Section 3.

### 2.6.1 Description

Proposed Level C Routes provide local connections for smaller trucks to businesses. These roads:

- Primarily provide local access for smaller trucks. Large trucks (over 65' in length) are also allowed on state-jurisdiction undesignated roads when traveling to/from a Class I or Class II highway, as appropriate under Illinois law;
- Should include a consideration for smaller truck access as one of many factors when considering investments;
- Should be designated as a Locally Preferred Truck Route or have no designation. State jurisdiction Class C roadways are state undesignated highways;
- Have a geometric and functional ability to handle a very low volume of large trucks. Typical design vehicles could include straight or delivery trucks (SU-30, WB-40, WB-50), or buses, which may be 30' to 55' long; and
- May utilize either AASHTO or NACTO design guidelines.

These roads prioritize business access for smaller trucks. Origins and destinations are often separated from other freight-reliant companies and are typically located away from industrial parks or off key arterial roads. Accessibility improvements for smaller trucks may be one of many factors considered when planning overall road investments.

Again, it is important to note that by Illinois Statute, large trucks are allowed to travel up to 5 miles from a Class I or Class II highway onto state or locally designated highways, or up to 1 mile from a Class I highway onto any roadway for purposes of pickup, delivery, fuel, food, or rest (barring a sign prohibiting truck access). Although large trucks are not desired in many areas of the study, access is allowed under this provision of Illinois Statute. IL-19 or Irving Park Rd. west of York Rd. is an example of this. As a State Route within 5 miles of I-290 (a



*Proposed Level C Route adjacent to small businesses on Center St. – Bensenville*

*Source: Photo by Sam Schwartz Engineering*

Class I highway), large trucks are legally able to travel on this road to reach destinations, but cannot use this roadway as a through route.

### 2.6.2 Criteria and Process

With proposed Level A and B routes already identified, the initial selection for this network was to identify businesses requiring truck access that are not served by the proposed Level A or B Truck Route network. As a first pass, routes were selected on roadways that do not have an existing local truck restriction. An additional analysis of land use and network connectivity was undertaken without considering existing truck restrictions to identify roads that may have a current restriction but require truck access.

### Land Use

Although shipping and receiving freight are not part of daily core business functions, professional service companies, commercial centers, public institutions, restaurants, and similar businesses need occasional truck access for delivery of parcels, food and paper goods, waste removal, and service vehicles. Proposed Level C routes are intended to serve locations that require infrequent deliveries that can be accomplished using smaller vehicles and connect them to the proposed Level A and B network. Identification of these parcels was undertaken with CMAP land use data supplemented by aerial imagery (Google Maps, Google Earth) and input from stakeholders.

### Network Connectivity

The second main consideration is ensuring that the network does not have any “orphan” segments that are unconnected to the rest of the network. This is a final check for both the proposed Level C network in isolation and for the proposed Level A, B, and C network as a whole.

### 2.6.3 Recommendations

Figure 2.4 below shows the proposed Level C Truck Routes with proposed Level A and B Truck Routes also shown to provide context and show the full system. In contrast to the Level A and B networks, Level C routes generally did not require extensions beyond the study area to ensure network connectivity.

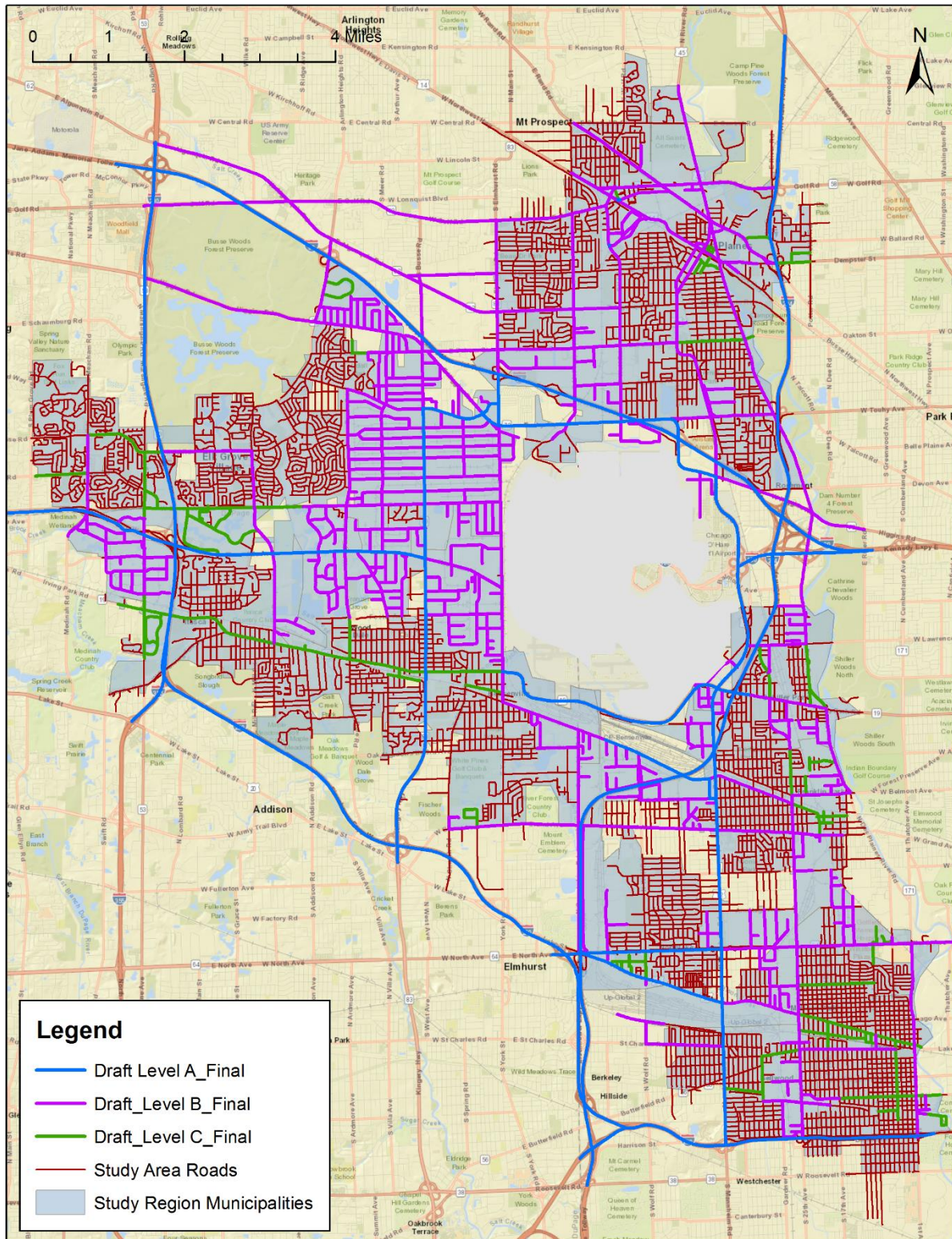


*Proposed Level C Truck Route on IL 19 (Irving Park Road) at Marshall Rd. (Connection to IL 83) – Bensenville*

*Source: Photo by Cambridge Systematics*



**Figure 2.4 Initial Proposed Level A, B, and C Truck Routes in the O'Hare Subregion**



Source: CMAP, IDOT, analysis by Cambridge Systematics, 2017



## 2.7 Level D Routes

This section describes the characteristics of proposed Level D routes, explains the criteria and process used to select them, and identifies initial proposed Draft Level D routes.

### 2.7.1 Description

Proposed Level D Routes are roads that serve primarily residential areas or are otherwise unsuitable for truck traffic. These roads:

- Strongly discourage or restrict truck access;
- Do not consider truck needs in investment decisions;
- Are either undesignated or have truck restrictions;
- May have the geometric and functional ability to handle very low volumes of smaller trucks, including delivery trucks (design vehicles DL-23 or SU-30), with a length of 30'; and
- Consider either AASHTO or NACTO design guidelines.



*Trucks Prohibited Sign  
Source: Photo by  
Cambridge Systematics*

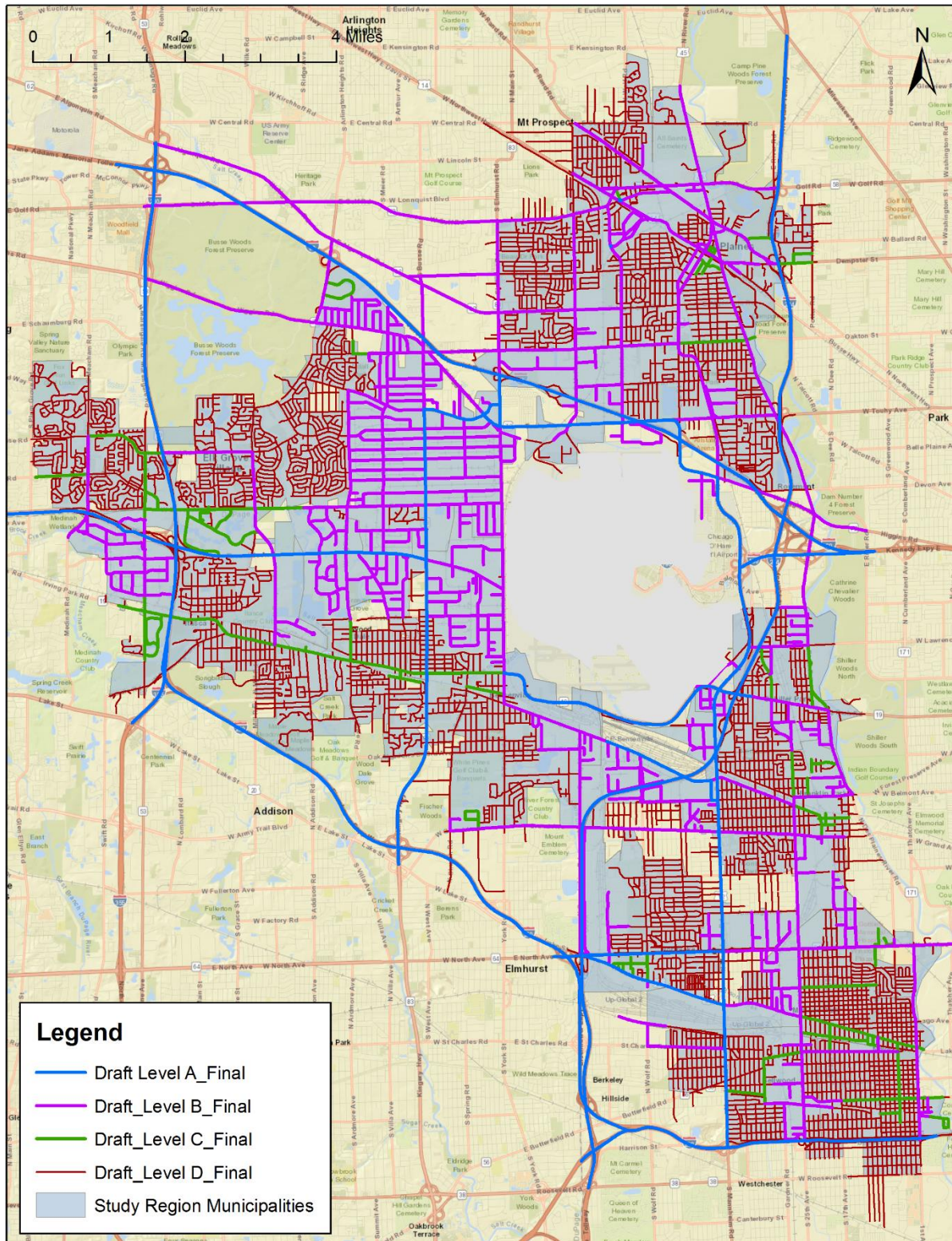
Proposed Level D roads are typically located in residential areas and truck traffic should be limited to smaller residential delivery vehicles, moving trucks, or trucks needed for residential services (e.g. electrician, landscaping).



*Proposed Level D Route – Pine St. at S 5<sup>th</sup> Ave. – Maywood  
Source: Google Maps*

These roads were identified through a process of elimination - any roads that were not deemed necessary for truck traffic and identified as Level A, B, or C were categorized as Level D routes. These roads are labelled as "Study Area Roads" in Figure 2.4. As a final screen, surrounding land uses were spot-checked to confirm that they do not require regular truck service. These roads already have or could reasonably introduce truck restrictions that would not negatively impact commerce in the region. Figure 2.5 below shows proposed Level D routes in addition to the proposed Level A, B, and C network.

**Figure 2.5 Initial Proposed Level A, B, C, and D Truck Routes in the O'Hare Subregion**



Source: CMAP, IDOT, analysis by Cambridge Systematics, 2017



### 3.0 Stakeholder Outreach Input into the Proposed Truck Route Network

Stakeholder input was sought during all portions of this study, used to develop the truck route criteria, and vet the proposed Level A, B, C and D routes. Both a Policy and Technical Committee were convened as part of the study, and a number of stakeholder interviews were conducted. Key stakeholder groups providing input into the study include:

- IDOT and Illinois Tollway staff;
- DuPage and Cook County staff;
- Municipal staff including decision makers, planning, engineering, and law enforcement personnel;
- Municipal conference staff;
- Private sector carriers through the Illinois Trucking Association (ITA); and
- CMAP staff.

The vetting process included a Joint Policy and Technical Committee Meeting held on March 30, 2017 in Franklin Park. More than two dozen stakeholders attended. Participants discussed revisions to the initial proposed Level A, B, C, and D routes and potential project needs with fellow stakeholders and provided input to the project team on future developments. This meeting also validated the Level A, B, C, D approach and confirmed that there was general agreement that proposed Level B routes should be targeted for investment and policy changes in order that will allow for designation as Class II Truck Routes.



*Draft Proposed Truck Route Network with comments – Joint Technical and Policy Committee Meeting, March 30, 2017*  
 Source: Photo by Cambridge Systematics

One of the key outcomes of this meeting is the O'Hare Subregion Proposed Truck Route Network shown in Figure 2.1.<sup>15</sup> Key changes from the initial proposal for Level A, B, and C routes and this Proposed Truck Route Network (shown in 5) include:

- Addition of Franklin Ave. and Elmhurst/York Rd. as Level A routes between IL 19 and CP Bensenville;
- Added numerous roads in Des Plaines as Level C to facilitate small truck access to local businesses;
- Change Biesterfield Rd. and S Arlington Heights Rd. in Elk Grove Village downtown from a Level B to a Level C and change Biesterfield Rd. to a D west of Rohlwing Rd. and add Nerge Rd. as a Level C;

<sup>15</sup> A high quality image of this map can also be found on CMAP's website.

- Addition of Wolf Rd. between Belmont Ave. and Grand Ave. as a Level B; and
- Show S Access Rd., W Cargo Rd. and Taft Ave. as part of Level B network. Additionally, extend Grand Avenue to make the connection to I-290 via U.S. 20. Although they are outside the study region, they connect a truck route in a participating municipality to a key intermodal freight facility at UP Global II.

A full list of recommended changes to the network from stakeholders is provided in Appendix B. Additional comments regarding infrastructure are discussed in Section 4.

## 4.0 Impact of Infrastructure Projects on the Proposed Truck Route Network

The Proposed Truck Route Network is based on current conditions; however, as conditions change and investments are made to the roadway network, it is important to re-evaluate and update the proposed truck route network to ensure that it continues to meet the needs of users and stakeholders. In this section, the impacts of two anticipated major capital projects in the region are examined. These projects are related to the Elgin O'Hare Western Access (EOWA) and are already in progress - under construction or in advanced planning/engineering stages. The impact of these and other potential capital projects and the need for updating will be considered when developing implementation recommendations for this study.

### 4.1 Completion of Elgin O'Hare Western Access

The Elgin O'Hare Western Access (EOWA) project is constructing a new Illinois Route 390 Tollway from I-290 east to IL 83 along the Thorndale Rd. corridor. This project will provide additional access to O'Hare Airport and surrounding communities. Additionally, when completed, it will provide additional interstate connections as a new I-490, connecting I-90, I-294, and the new Illinois Route 390 along the western side of O'Hare Airport.

#### 4.1.1 IL 390 Tollway

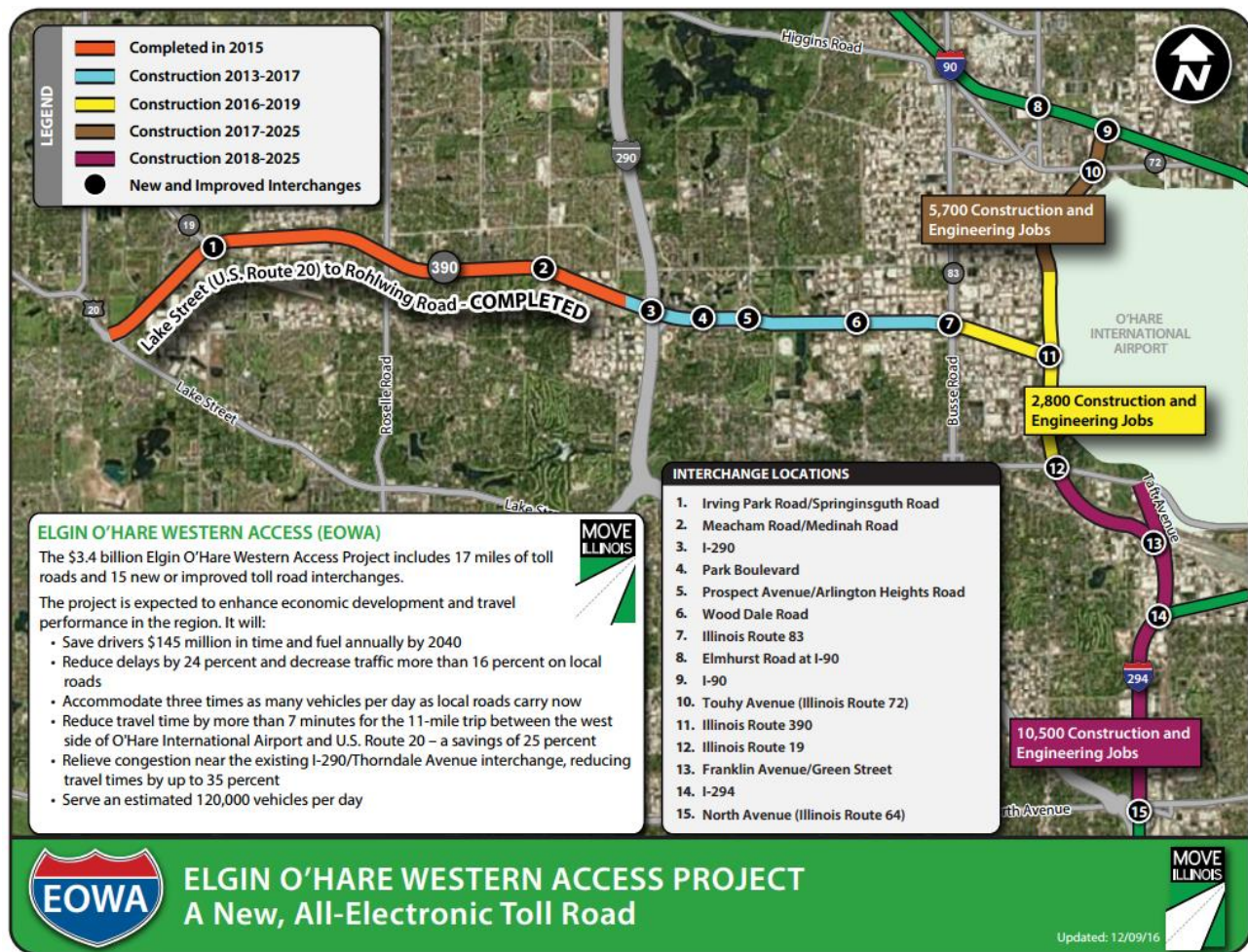
Currently underway, the IL 390 project expands the limited access highway along the Thorndale Corridor east to IL 83. This first section is anticipated to be completed by the end of 2017. Note that the new interchange at Elmhurst Rd. and I-90 will soon be complete and influenced the selection of proposed Level A and B roads.<sup>16</sup> Tollway construction status as of January 2017 is shown in Figure 4.1.

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<sup>16</sup> For example, the inclusion of Landmeier Rd. between IL 83 and Elmhurst Rd. was specifically driven by the completion of this project.





**Figure 4.2 Elgin-O'Hare Western Access Project Map**

Source: Illinois Tollway

The completion of the entire project would significantly impact truck travel in the region. It would allow additional highway connections to/from O'Hare Airport and CP Bensenville from points west and south, potentially shifting a significant amount of truck traffic off of the local road network, reducing the burden on local streets. Additionally, the project would provide direct access to southbound travel on I-294 through the new interchange located south of O'Hare Airport (currently many trucks travel as far north as Balmoral Avenue to use the southbound I-294 interchange).

Thorndale Ave., which will remain as a frontage road for local access at the completion of the project, should become a Level C along the entire corridor to accommodate local access. York Rd. should remain a Level B to provide a link to the new interchange planned at York Rd.

The project includes three interchanges west of York Rd. located at Prospect Ave./Arlington Heights Rd., Wood Dale Rd., and IL 83. Roads connecting to these interchanges should be at least Level B in order to accommodate trucks travelling to/from the tollway. IL 83 is already identified as a proposed Level A route, Wood Dale Rd. and Prospect Ave. are identified as proposed Level B routes.

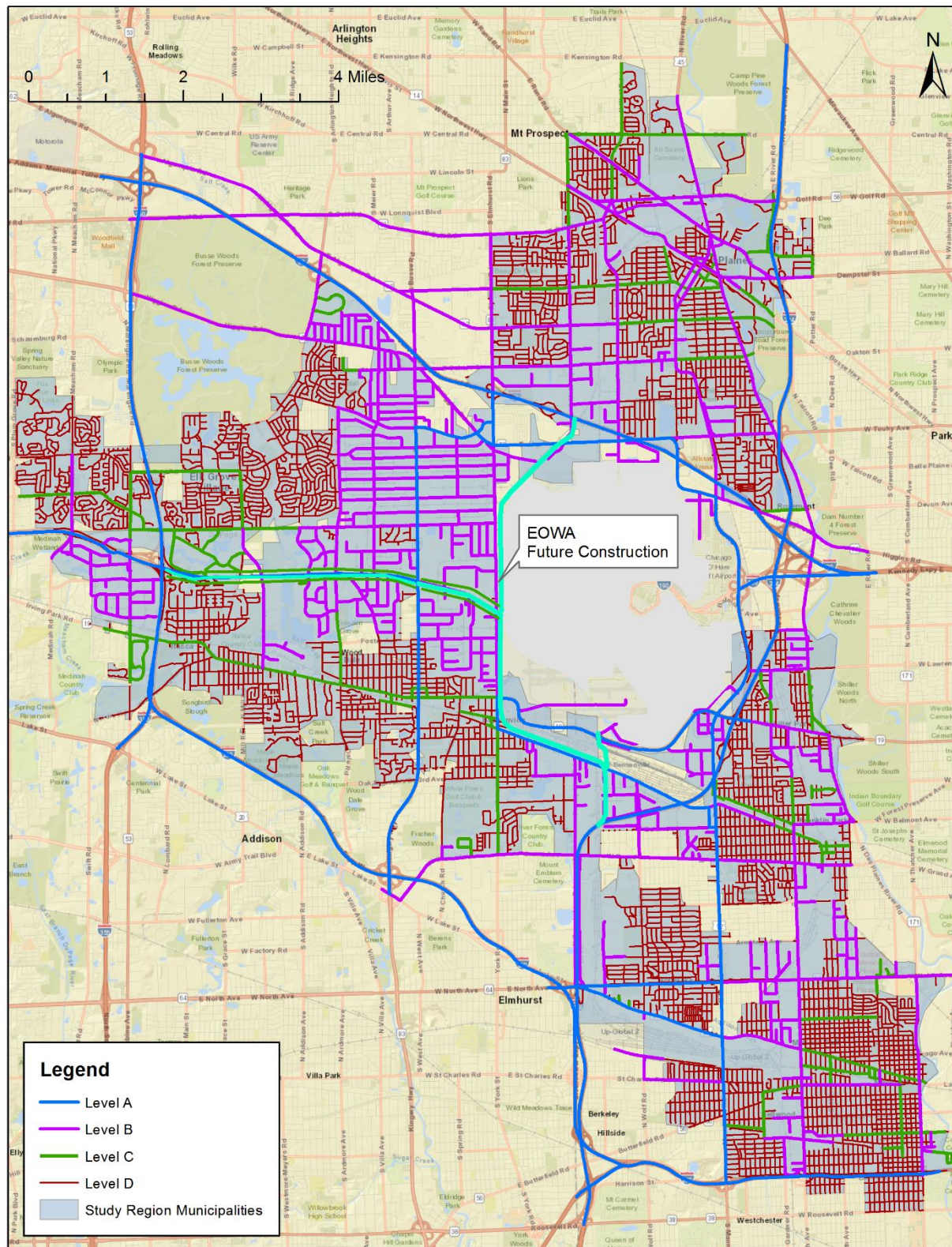
Finally, IL 19 will require observation as the project is completed. Identified as a proposed Level C route, the road is a state highway within 5 miles of a Class I or Class II truck route for its entire length through the study

region, meaning that large trucks can utilize it for travel to/from locations for loading, unloading, rest, food, or fuel. As one of the few east-west corridors, trucks may attempt to use it as an alternate through route. Although illegal under current statute, enforcing this would be difficult as trucks using it in this manner would be very difficult to differentiate from trucks legally traveling under the reasonable access provision.

An image showing the portion of the EOWA project located east of IL 83 overlaid on the O'Hare Subregion Final Truck Route Network is found in Figure 4.3.



Figure 4.3 O'Hare Subregion – Proposed Truck Route Network and EOWA



Source: CMAP, IDOT, Illinois Tollway, analysis by Cambridge Systematics, 2017. Approximate location of Thorndale Ave. frontage roads.

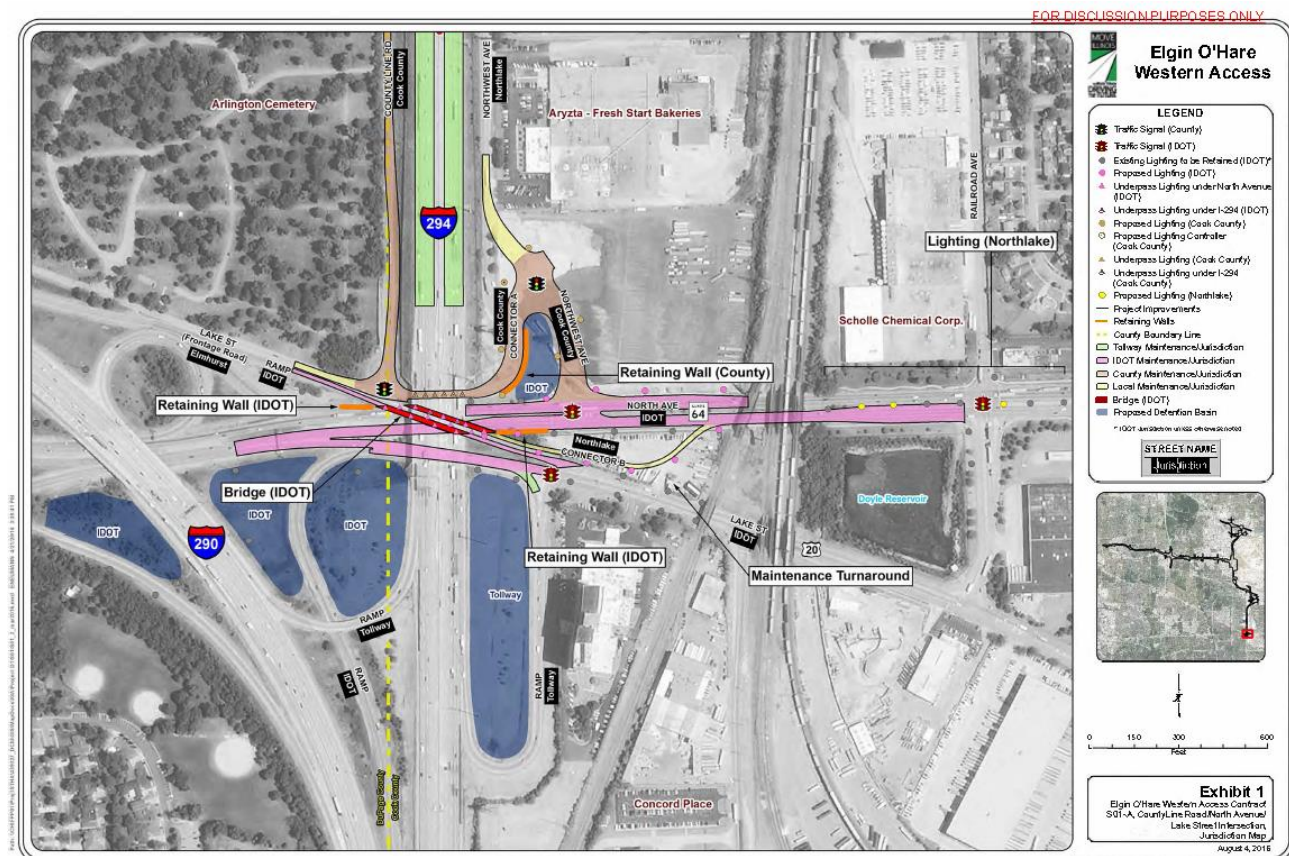


#### 4.1.2 Completion of I-294 SB Ramp to County Line Rd.

The Illinois Tollway is also completing two projects in the I-294 corridor as part of the larger EOWA project. Phase I of the project is a reconstruction of the County Line Rd./E Lake St./Northwest Ave./North Ave. area in Northlake, shown in Figure 4.4 below. Scheduled for completion in 2018, this project should greatly improve safety and mobility for trucks in an area that has been identified as problematic by stakeholders. However, since all of the impacted roads are already identified as Level B Routes (with the exception of North Ave. which is a Level A Route), completion of this project should not require any changes to the network.

Phase II of the project includes a southbound only exit ramp from I-294 on to County Line Rd. as shown in Figure 4.5 below. Phase II is fully funded and scheduled for construction in 2019. Completion of this project may divert some truck traffic from Mannheim Rd. and increase the importance of east-west connections from County Line Rd. to points east (specifically Grand Ave. and North Ave.). County Line Rd. may be considered for inclusion as a Level A route, especially if the new ramp is used as an alternative access point to reach the CP Bensenville Yard instead of the designated NHS Intermodal Freight Connector route on Mannheim Rd., Williams/Cenco Pkwy., and Franklin Ave.

**Figure 4.4 Illinois Tollway – Elgin O'Hare Western Access, County Line Road/North Avenue/ Lake Street Intersection**



Source: Illinois Tollway

**Figure 4.5 Illinois Tollway – Elgin O'Hare Western Access, Southbound I-294 to County Line Rd.**

FOR DISCUSSION PURPOSES ONLY



Source: Illinois Tollway



## 5.0 Truck Route Opportunities and Barriers

Defining truck routes is not a simple exercise. The very concept of a truck route can have multiple meanings across municipalities and states and there are some systemic challenges in creating a network that will serve the needs of all users. This section provides a high level overview of Truck Route opportunities and barriers identified through the analysis and outreach portions of this study in addition to lessons drawn from similar studies conducted by CS. It also includes a more focused examination of policy/regulatory and infrastructure barriers specific to the O'Hare Subregion.

### 5.1 Truck Route Opportunities

#### 5.1.1 Funding

Truck routes are typically developed as an enforcement mechanism, an investment mechanism, or a blend of the two. The O'Hare Subregion Proposed Truck Route Network is primarily an investment network. The designation of an investment network means it is intended to guide truck-related infrastructure investments and supporting policies, and provide assurance to businesses that rely on trucks that a route is important and will be emphasized for freight. The investment approach is meant to guide the future designation of routes by identifying infrastructure or policy issues that must be addressed before designation can occur.

Developing a truck route network also provides guidance and justification for potential future projects. The Fixing America's Surface Transportation, or FAST Act, signed by President Obama on December 4, 2015 provides a dedicated source of federal freight funding for the first time in the nation's history. Truck route infrastructure projects may be able to tap into that funding through one of two routes. For larger projects, the FASTLANE Grant program offers the best opportunity for funding. This competitive grant program is expected to award \$4.5 billion in funds over the five-year life of the FAST Act. The first round of grant awards totaling nearly \$800 million were announced in July 2016.<sup>17</sup> Projects such as EOWA or major at-grade rail separations could be viable candidates for this funding.

The second potential funding source for truck route projects is through the federal freight formula funding program, the National Highway Freight Program (NHFP). Illinois is expected to receive approximately \$225 million (\$45 million annually) over the five-year time period. Money can be used for projects located on the National Highway Freight Network (NHFN) which is composed of<sup>18</sup>:

- **Primary Highway Freight System (PHFS):** most critical highway portions of the U.S. freight network including 37,436 centerline miles of Interstates and 4,082 centerline miles of non-Interstates<sup>19</sup>;
- **Other Interstate portions not on the PHFS:** The estimated 9,511 centerline miles of Interstate that were not part of the PHFS<sup>20</sup>;

<sup>17</sup> <https://www.transportation.gov/buildamerica/FASTLANEgrants>

<sup>18</sup> [http://www.ops.fhwa.dot.gov/Freight/infrastructure/ismt/state\\_maps/states/illinois.htm](http://www.ops.fhwa.dot.gov/Freight/infrastructure/ismt/state_maps/states/illinois.htm)

<sup>19</sup> Illinois has 1,685 miles included in this designation.

<sup>20</sup> Illinois has 587 miles included in this designation.



- **Critical Rural Freight Corridors (CRFCs):** Public roads not in an urbanized area which provide access and connection to the PHFS and Interstates with ports, public transportation facilities, or other intermodal freight facilities; and
- **Critical Urban Freight Corridors (CUFCs):** Public roads in urbanized areas with provide access and connection to the PHFS and Interstates with ports, public transportation facilities, or other intermodal freight facilities.

Many of the Level A and B routes overlap the proposed draft CUFC list developed by CMAP staff. In future years, as projects are completed or Illinois is allowed to designate additional miles, it is possible that CMAP in consultation with IDOT may designate new CUFCs. If so, the truck route network developed in this study should be amended as needed.

Lastly, it is recommended that CMAP, to facilitate funding of future improvements, designate its draft Critical Urban Freight Corridors, as permitted under the FAST Act.

### 5.1.2 Permitting

While the vast majority of trucks on the road are within the legal limits, oversize/overweight (OS/OW) trips are important planning considerations. Furthermore, these types of trips are increasing in frequency.<sup>21</sup> These trucks must obtain a permit for any road used during the trip, an often laborious and frustrating task when a short trip might cross through multiple jurisdictions with roads under the control of municipal, county, and state agencies each with their own point of contact, rules, and application processes.

CMAP and its partners have already taken steps to address this issue. The Regional Truck Permitting Study, completed in the fall of 2016<sup>22</sup>, identified a number of recommendations to address “low hanging fruit” including the use of a standard permit application form, creating a single site with all necessary contact information, and better inter-agency sharing and publication of data. Understanding how OS/OW trucks are routed may influence truck route funding decisions, and the push for cooperation between agencies and enhanced use of data also helps meet the need to monitor and update this Proposed Truck Route Network. Similarly, knowledge of the truck route network enables county, municipal, and township road owners to pre-screen routes for various common levels of OS/OW traffic, which would allow them to explore jointly issued permits for routine loads.

### 5.1.3 Municipal Coordination

A common issue when developing and maintaining an effective truck route network is the fractured understanding of the need and role for truck routes between municipalities. Truck routing is typically driven by land use patterns—trucks need access to areas that produce and consume freight. Because land use decisions are made at the municipal level, bordering municipalities can have freight-reliant businesses in close proximity to vulnerable areas such as high-population-density residential areas, community uses such as community centers and schools, or open space. Roads that provide access in one community can cause

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<sup>21</sup> <http://apps.trb.org/cmsfeed/TRBNetProjectDisplay.asp?ProjectID=3639>

<sup>22</sup> Cambridge Systematics, Inc. *Regional Truck Permitting Study: Draft Final Report*. October 2016. Online at: <http://www.cmap.illinois.gov/documents/10180/487159/Regional+Truck+Permitting+Plan+Final+Report+DRAFT+2016-10-14.pdf/ecdb090e-725d-445a-9e74-c60dc69f44ff>

problems in an adjacent one. Furthermore, differing municipal codes or interpretations (e.g., what is a truck, when can OS/OW trucks travel, what is required for permitting) can create further confusion.

One of the main goals of this study was to work at a regional level and involve multiple bordering municipalities to develop a coordinated Truck Route network. Creating relationships between municipalities, CMAP, and IDOT will help alleviate the concerns noted above and improve implementation of the network. Opportunities exist for the participating municipalities to improve coordination with their neighbors which did not participate in the study.

#### *5.1.4 Truck Restrictions and IL Access Laws*

State law allows for trucks to travel legally off of designated truck routes in order to make deliveries, or access food, fuel, or rest for the driver. These “reasonable access” provisions vary depending on the length of truck and truck route.

- For trucks with an overall length of more than 65', access on local roads and streets is limited to the following conditions:
  - Access is permitted on any local road or street within 1 mile of a Class I truck route, unless signs are posted restricting such access.<sup>23</sup>
  - Access is also permitted from State-Designated Class I and Class II truck routes for 5 miles onto any locally Designated Class II or Class III truck route or undesignated state highway.

Otherwise, access for trucks longer than 65' (including most semi-trucks with 53' trailers) is unlawful on local roads and streets. This is highly restrictive. In lieu of a change in Illinois Statute, the region needs to designate a robust Class II Truck Route system to assure lawful travel.

- For trucks with an overall length of greater than 55', but not more than 65', lawful access is limited to the following conditions:
  - From a State-Designated highway, access for loading and unloading freight is permitted for 5 miles on all municipal, county, and township roads.
  - From a State Designated highway, access for food, fuel, repairs, and rest is permitted for 1 mile on municipal roads, and 5 miles on county and township roads.

Otherwise, access for trucks with an overall length of greater than 55', but not more than 65' is unlawful on local roads and streets. Given the availability of State-Designated truck routes, this is only moderately restrictive.

- For trucks up to 55' in overall length, access is unrestricted by state statute. Local governments may apply additional restrictions, provided they are signed.

These restrictions create conflict as many facilities relying on trucks for pickup and delivery of goods are not reachable using the allowable roadways under current law. For example, trucks over 65' long cannot legally

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<sup>23</sup> Access here means to points of loading and unloading, and facilities for food, fuel, rest and repair provided there is no sign prohibiting that access

travel to designations in the Elk Grove Village industrial park, one of the most truck-intensive areas in the study region. The Level B network identified in this study is intended in part to alleviate this conflict, as it recommends Class II truck route designations to connect these industrial facilities to state and interstate routes, providing unambiguous legal authority for truck access.

The current Illinois statutes limiting truck movement present opportunities for municipal coordination in designating a comprehensive Class II Truck Route network that will serve the needs of commercial carriers and businesses while protecting communities by discouraging or prohibiting trucks from areas they are not desired or needed. The proposed Level B routes along with select proposed Level A roads should guide designation of the Class II Truck Routes. Again, the inclusion of smaller industrial roads as proposed Level B Routes (and the intention to eventually designate them as Class II Truck Routes) was done specifically to promote this opportunity.

Figure 5.1 below shows the implications of the reasonable access provisions in Illinois statute for trucks greater than 65':

- Class I Truck Routes – Trucks greater than 65' may use these roads;
- Class II Truck Routes – Trucks greater than 65' may use these roads;
- Class III Truck Routes – In the study region, all Class III truck routes are located within 5 miles of a Class I exit, so trucks greater than 65' may use these roads to travel to/from destinations;
- State Highways Not Designated as Truck Routes – All state-jurisdiction highways in the study region are within 5 miles of a Class I truck route exit. Trucks greater than 65' may use these roads to travel to/from destinations; and
- 1-Mile from Class I Truck Route Exits<sup>24</sup> – Trucks greater than 65' may use these roads if there are no posted restrictions.

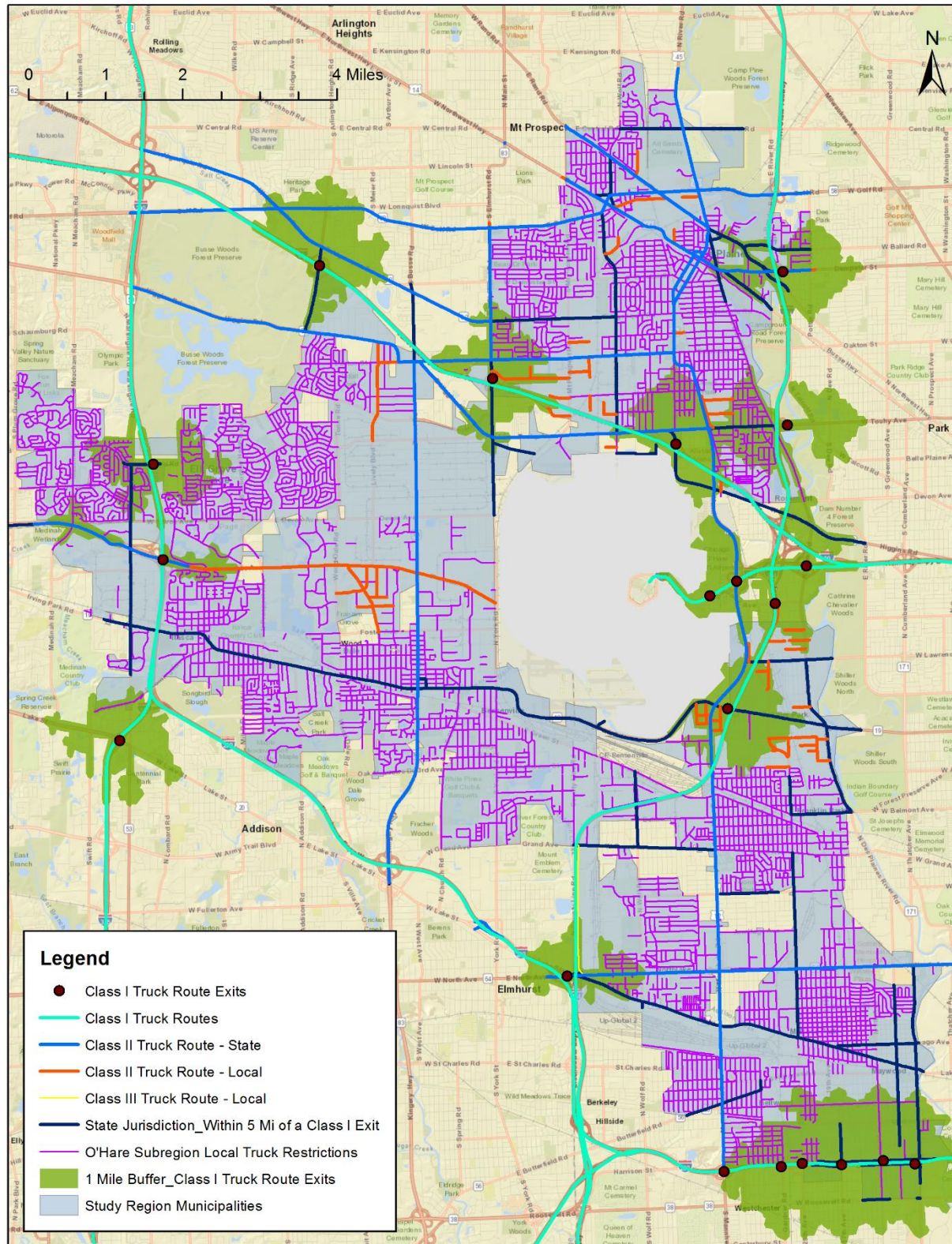
Figure 5.2 also maps the implications of the reasonable access provisions under Illinois law, but includes the completed EOWA as a Class I truck route.

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<sup>24</sup> Distance is calculated along the highway.



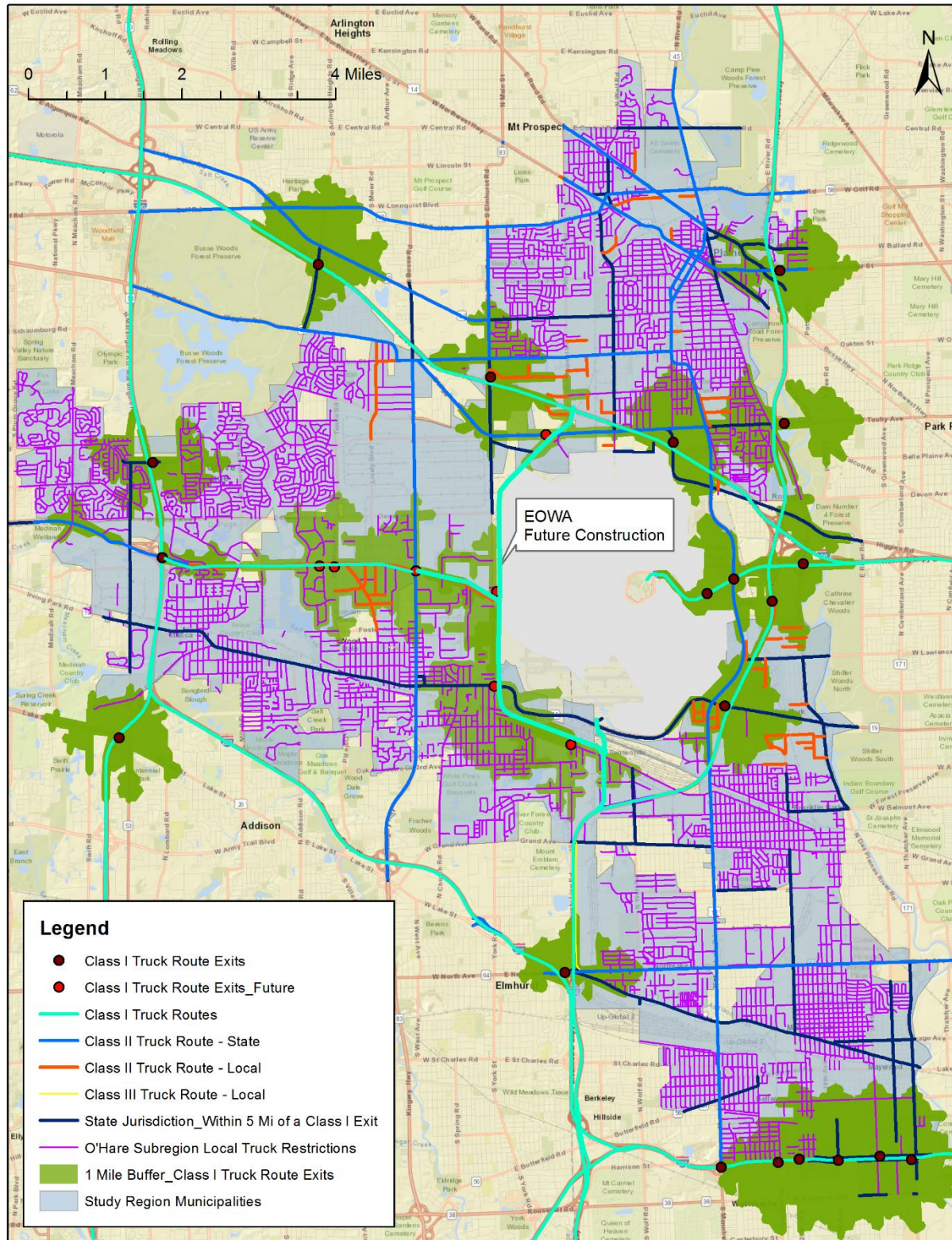
**Figure 5.1 Current Legal Access for Trucks Greater than 65' in Length in the O'Hare Subregion**



Source: CMAP, IDOT, analysis by Cambridge Systematics, 2017



**Figure 5.2 Future Legal Access for Trucks Greater than 65' in Length in the O'Hare Subregion with Completion of the Elgin-O'Hare Western Access**



Source: CMAP, IDOT, Illinois Tollway, analysis by Cambridge Systematics, 2017

## 5.2 Barriers to Multi-Jurisdictional Truck Routes

There are a number of barriers to developing a coordinated and effective truck route network that is of value to both municipalities and the private sector. A number of broad issues are identified first, followed by a more detailed discussion of administrative and policy barriers that occur specifically in the study region.

### 5.2.1 *Changing Conditions*

Truck routes are heavily influenced by land use patterns. Recent land use planning trends have seen a return to more mixed-use environments, especially in downtown areas or along important corridors. Investing in truck-related infrastructure may not be a divisive issue in an area where industrial and commercial land uses dominate (such as a business or industrial park). However, in historically industrial areas that are transitioning to mixed-use but still retain legacy industries or commercial corridors that link freight-reliant businesses to the regional highway network but also support retail or small businesses, these decisions are more complex.

Similarly, changing priorities or ordinances can also require periodic updates. For example, IDOT has moved away from designating Class III Truck Routes which were designed to carry trucks up to 73,280 pounds. Roads such as York/Elmhurst Rd. in Bensenville still carry local ordinance weight restrictions consistent with the former Class III weights, now less than the state's standard 80,000 pounds. Such ordinances need to be changed to accommodate trucks on this critical freight corridor. This underscores the need for periodic review and update of local ordinances to account for these changing land use patterns. Provisions for reviewing and updating the ordinances will be included as part of the recommendations of this study.

### 5.2.2 *Lack of a "Champion"*

Freight remains the "hidden" side of the transportation network. Few elected officials or citizens have a complete understanding of the supply chains required to deliver goods to shelves or keep a local manufacturing company in business. This movement of goods is almost entirely conducted by private companies, many of whom are hesitant about sharing data with public agencies for fear of losing a competitive advantage. For these reasons, freight lacks a single "champion" similar to other road users including automotive, transit, bicycling, or pedestrian groups. Local Chambers of Commerce and Economic Development groups, who have a strong interest in freight movement but often have differing priorities and may compete with one another, may need to play a more active role in supporting local land use and routing decisions that benefit their stakeholders. Trucking companies, who are often the most directly impacted, do not typically have the time and resources needed to advocate publically except through a state organization such as the Illinois Trucking Association (ITA).

At the State level, the FAST Act recommendation to convene Freight Advisory Committees (FACs) may help guide and promote freight-related action at the state level. In fact, the Illinois Department of Transportation convenes the Illinois State Freight Advisory Committee in part based on this recommendation. It remains to be seen if this momentum and advocacy can reach the local level where most truck routing and land use decisions are made.

### 5.2.3 *Infrastructure Barriers*

Insufficient infrastructure to handle truck traffic can be a significant barrier to truck movements. Common barriers include weight restricted bridges, height limits, poor turn radii, insufficient space for trucks to queue

at a stop sign or light, narrow road width, reduced sight-lines, and at-grade rail crossings with a large elevation change. Capacity issues are also a major concern – truck congestion can also exacerbate infrastructure related barriers. An initial list of infrastructure issues identified by stakeholders in the O'Hare Subregion includes:

- Limited space for trucks to queue on Belmont Ave. approaching Mannheim Rd. after making turn from Williams/Cenco Pkwy (Franklin Park);
- Green/Franklin Ave. at York/Elmhurst Ave. identified as a problematic intersection (Bensenville);
- Poor sight-lines and signage on North Ave. at I-294 underpass to direct trucks on to County Line Rd./Northwest Ave./Railroad Ave. (Northlake);
- Multiple turning movements for access to UP Global II yard – connection from North Ave. – Railroad Ave. – Lake Ave. – 47<sup>th</sup> St. (Northlake);
- Low bridge clearance at CN overpass on Grand Ave. east of I-294 (Northlake);
- Delays on Irving Park Rd. and Mannheim Rd. due to long queues to enter O'Hare airport facilities as well as general congestion on these roadways; and
- Long wait times for trucks on Addison St. making turn onto Wolf Rd. due to large amounts of truck traffic (Franklin Park).

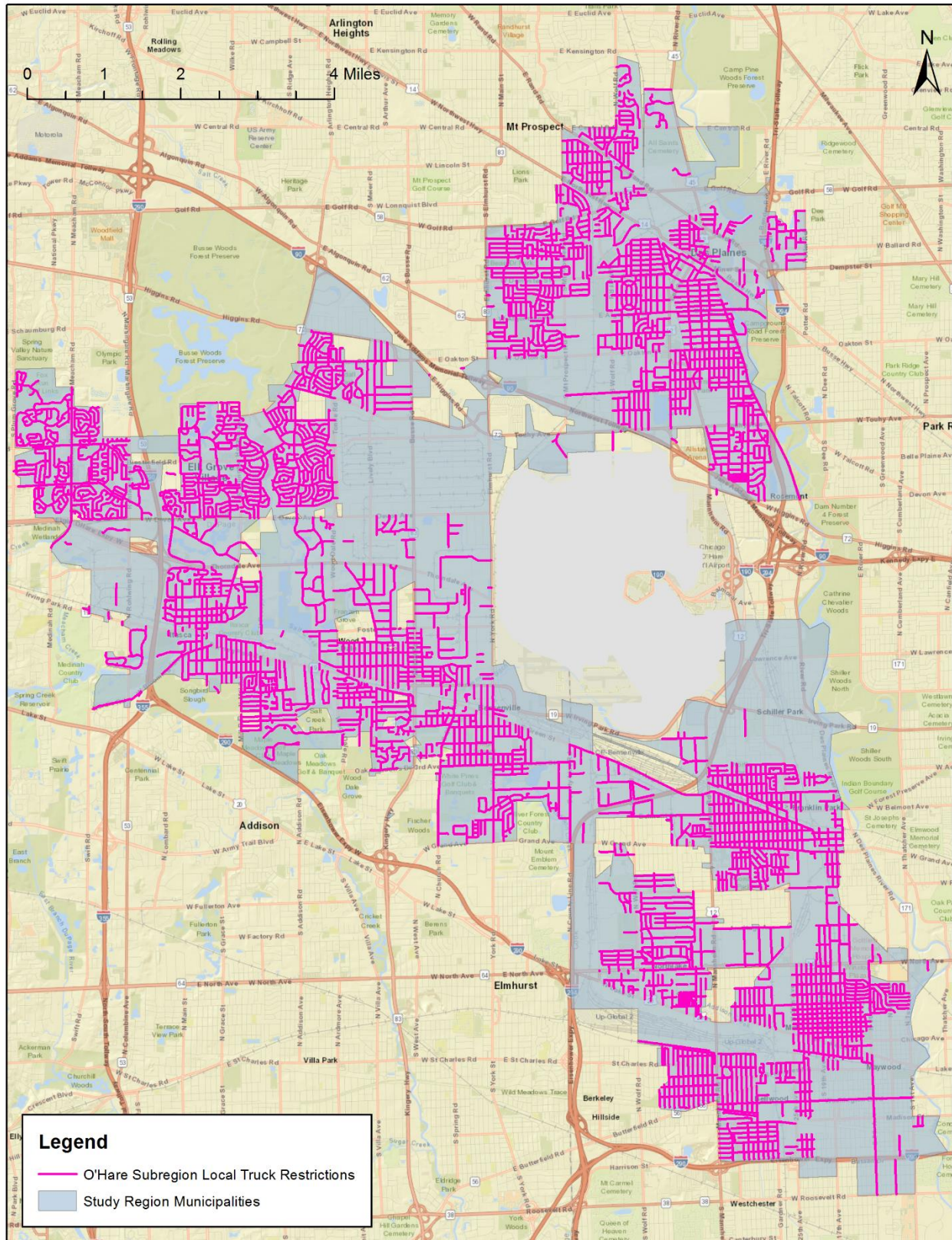
#### *5.2.4 Policy/Administrative Truck Restrictions*

In addition to the broad concerns identified above, there are a number of existing municipal truck restrictions in the study region that were identified by the project team and CMAP. Figure 5.3 shows truck restrictions on local (county and municipal) roads in the O'Hare Subregion. There are several types of restrictions. Many of these restrictions are categorical, for example applying to all local streets within a municipality. Restrictions may include truck prohibitions (with or without exceptions) or weight limitations (with or without exceptions).

It is important to note that, under Illinois statute, truck restrictions must be designated by ordinance and signed. This study did not include an analysis of restriction designation or an inventory of signs, thus the information presented in Figure 5.2 should be used for guidance only and not to enforce truck movements.



**Figure 5.3 Current Local Truck Restrictions in the O'Hare Subregion**



Source: CMAP analysis of municipal ordinances

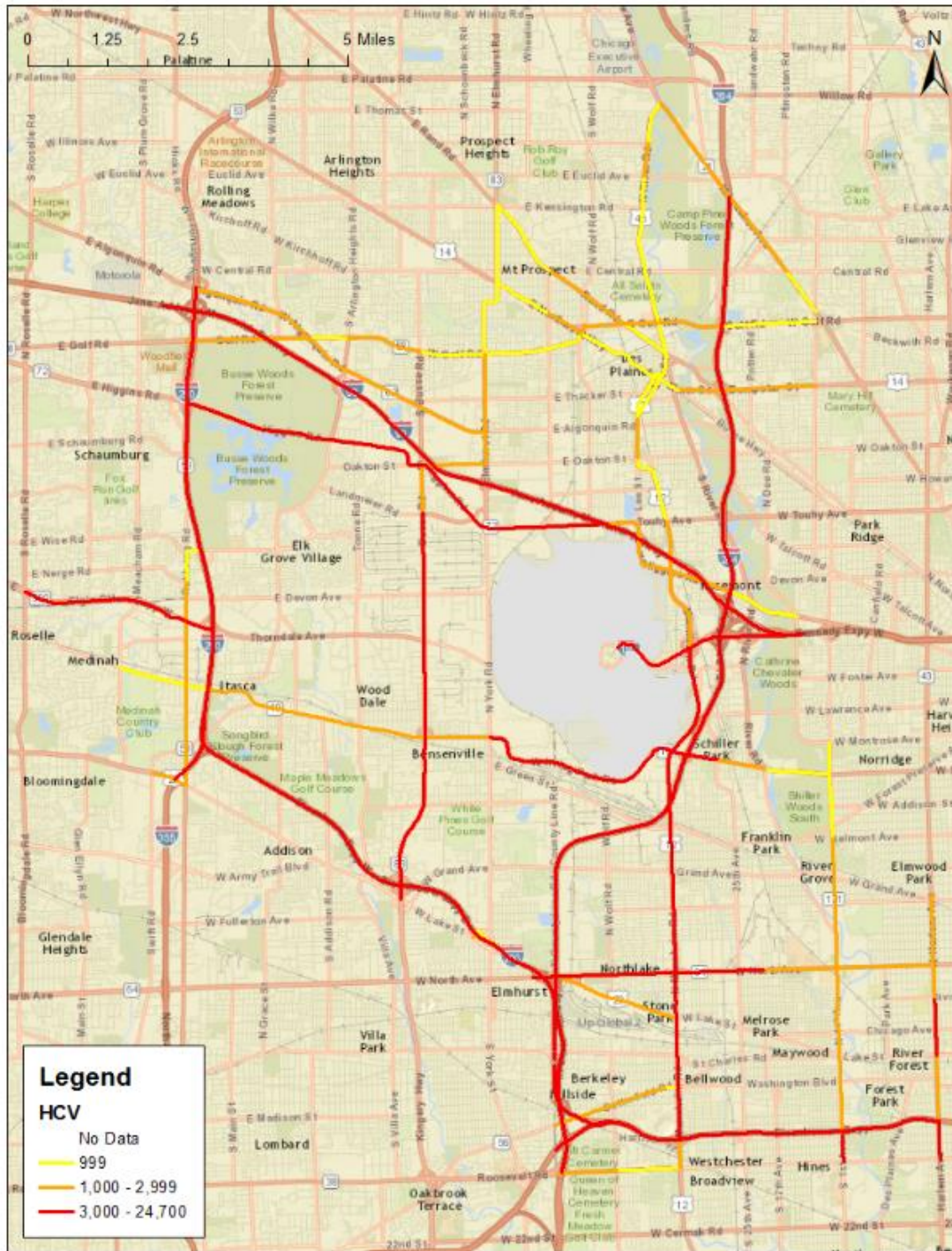




# Appendix A. Proposed Truck Route Level Criteria Maps

## A.1 Proposed Level A Truck Route – Select Criteria

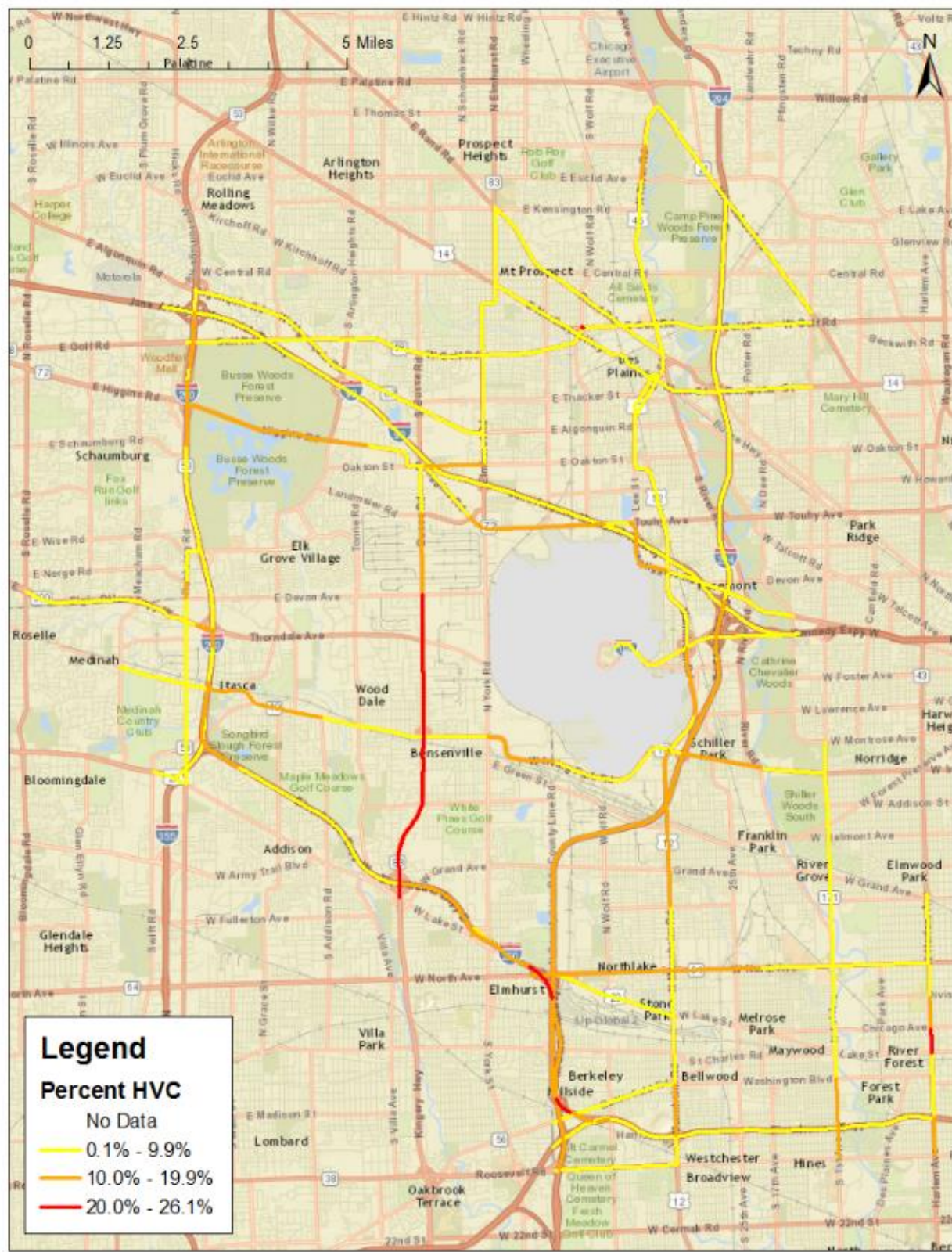
Figure A.1 O'Hare Subregion – HCV Volume



Source: CMAP, IDOT, analysis by Cambridge Systematics, 2017



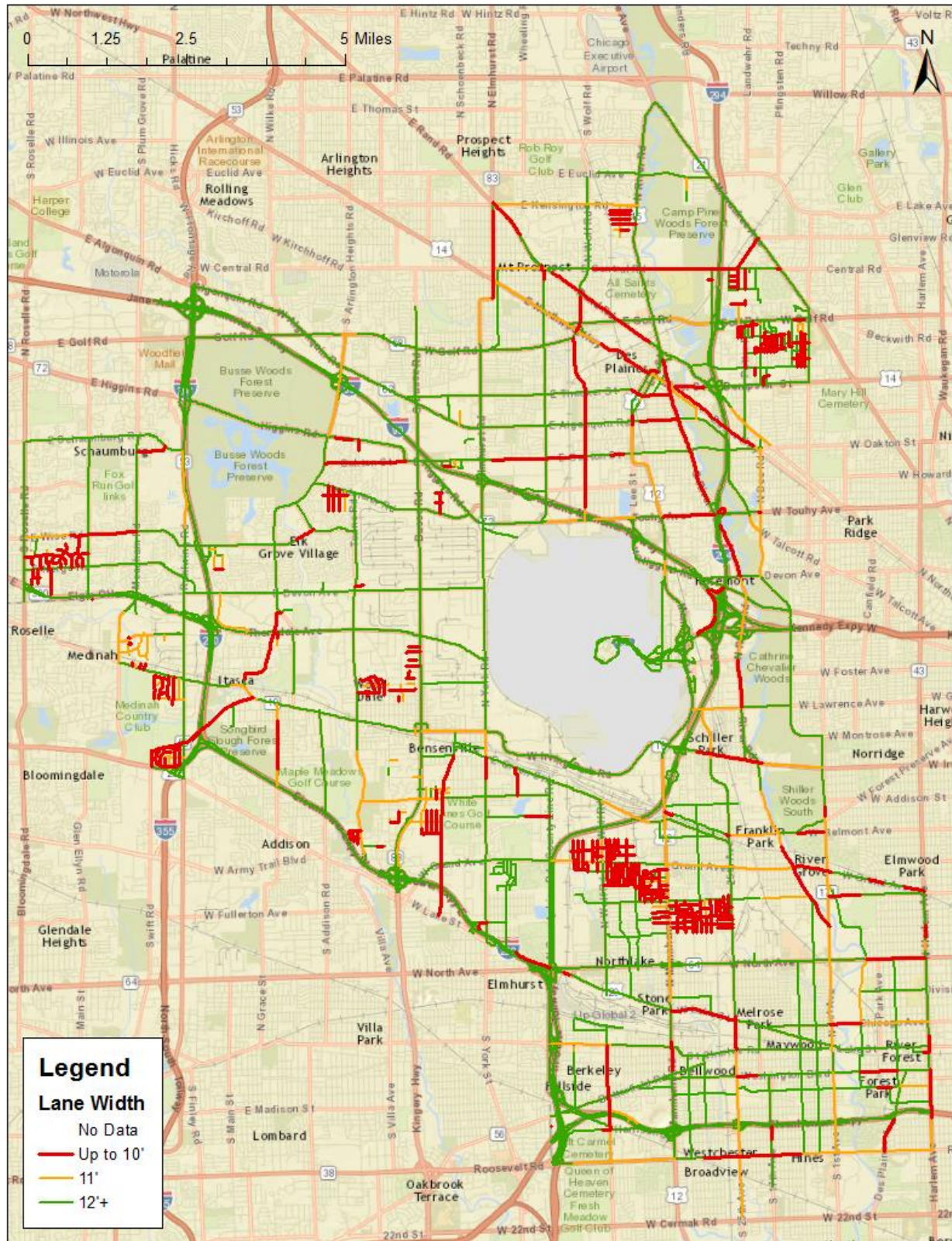
### Figure A.2 O'Hare Subregion – HCV Percent Volume



Source: CMAP, IDOT, analysis by Cambridge Systematics, 2017



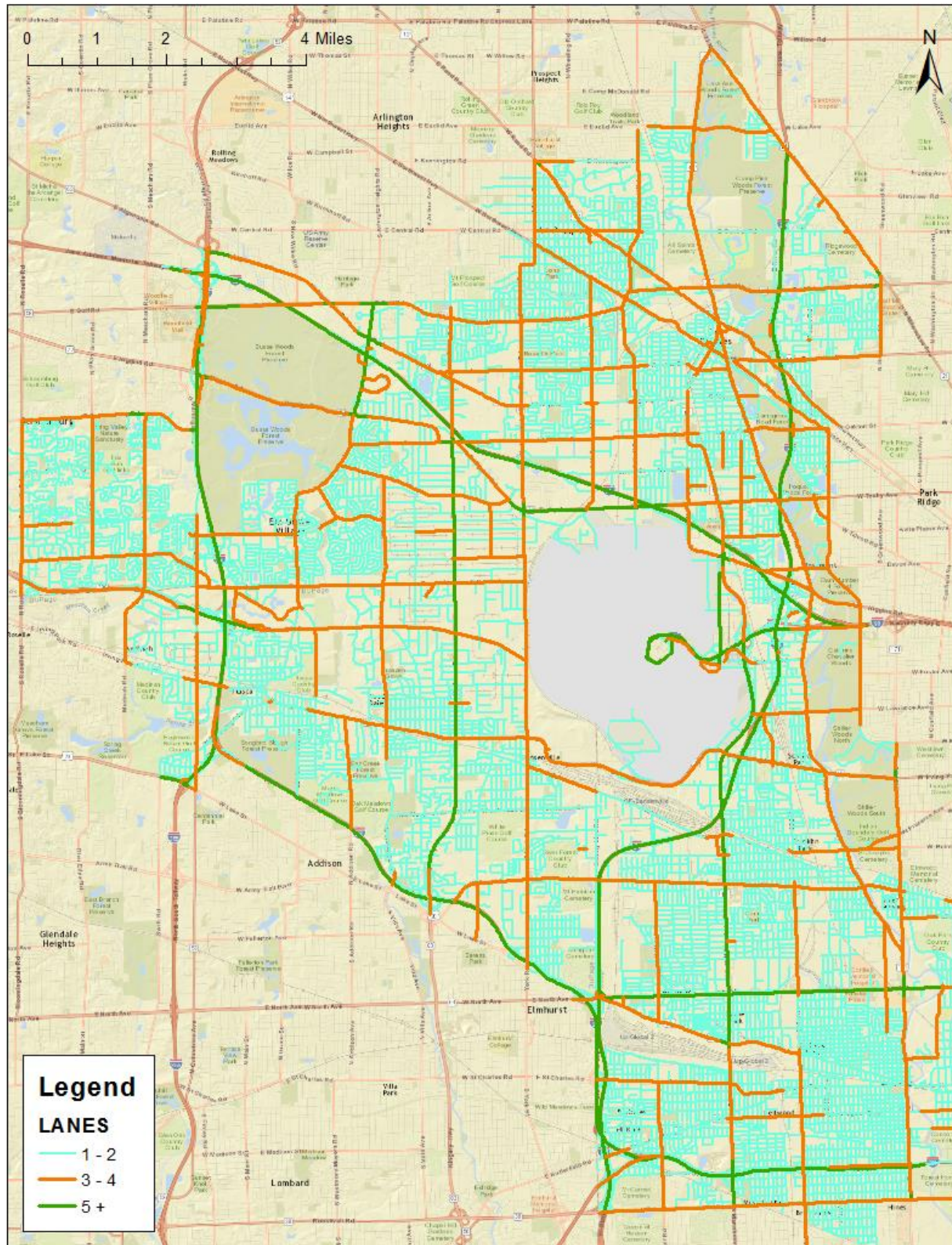
Figure A.3 O'Hare Subregion – Lane Width



Source: CMAP, IDOT, analysis by Cambridge Systematics, 2017



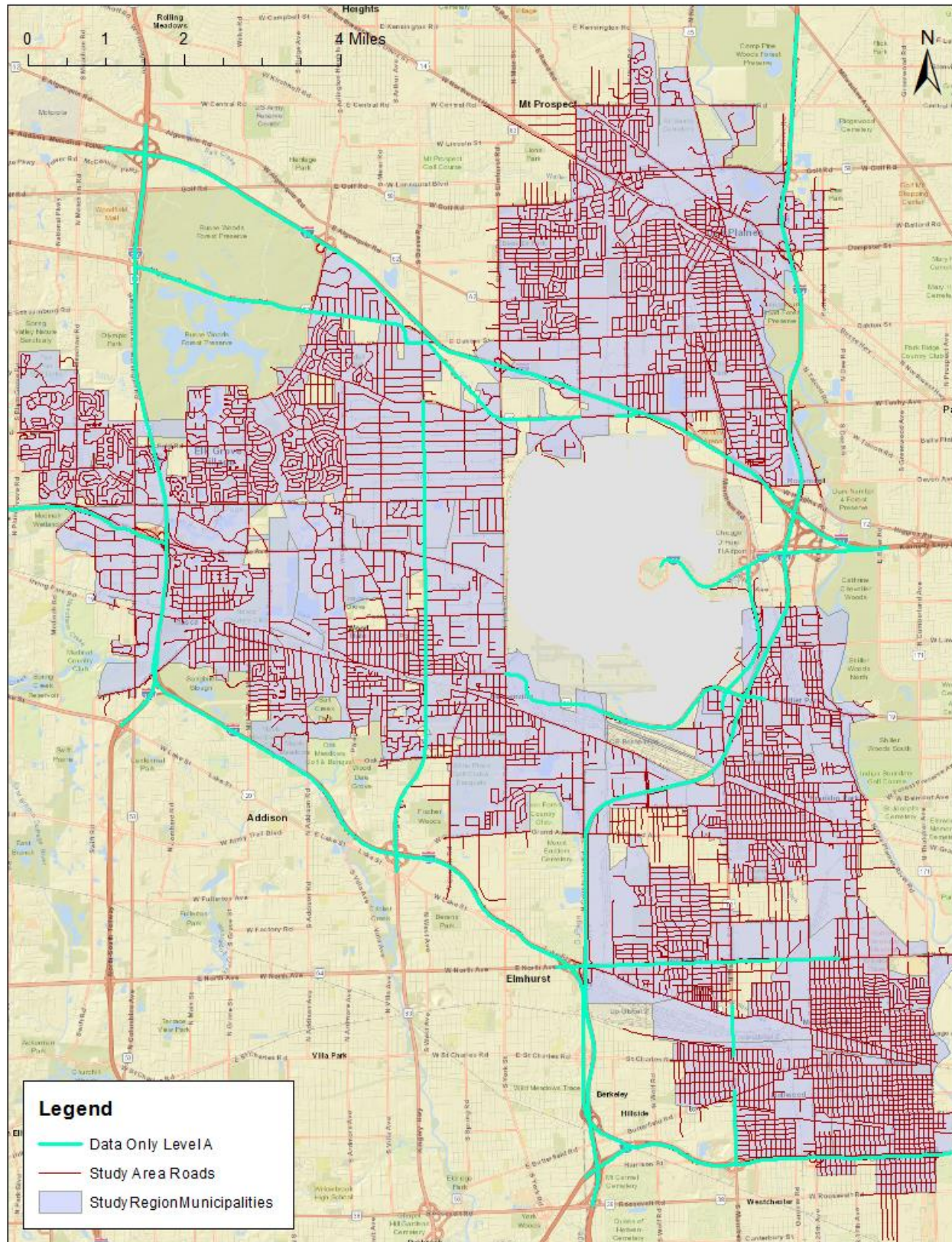
Figure A.4 O'Hare Subregion – Number of Lanes



Source: CMAP, IDOT, analysis by Cambridge Systematics, 2017



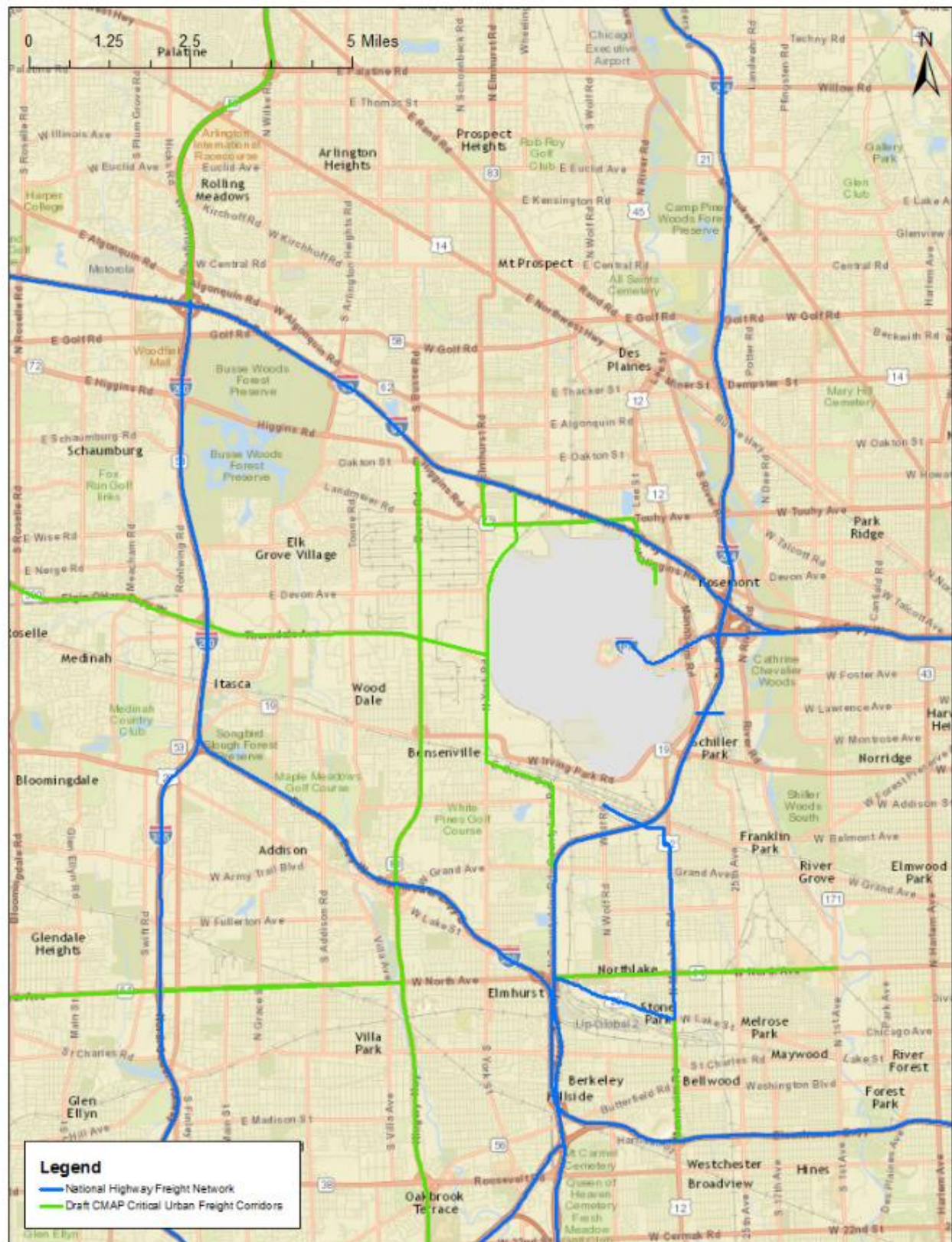
Figure A.5 O'Hare Subregion – “Data Only” Proposed Level A Truck Routes



Source: CMAP, IDOT, analysis by Cambridge Systematics, 2017



Figure A.6 O'Hare Subregion – NHFN/CUFC

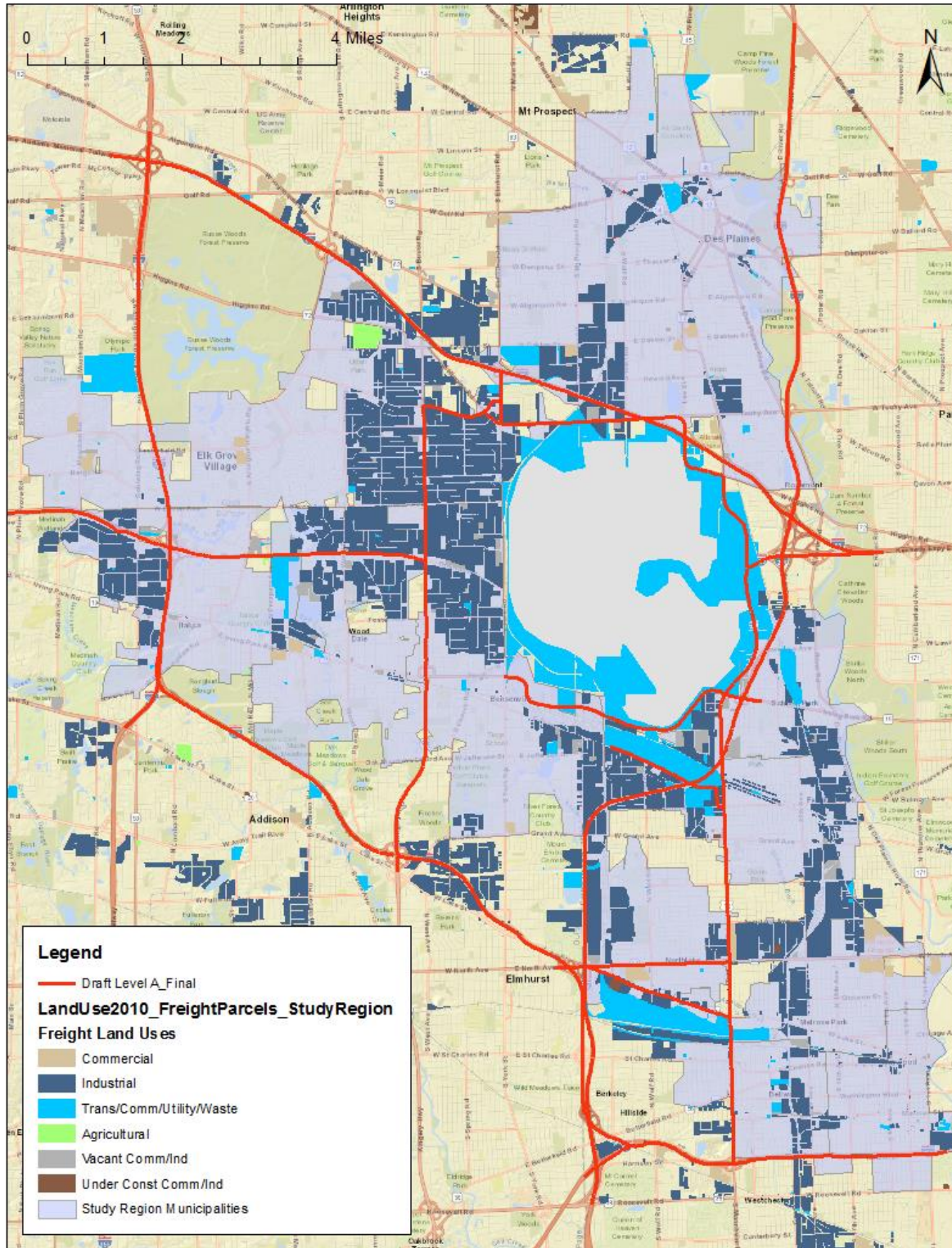


Source: FHWA, CMAP



## A.2 Proposed Level B Truck Route – Select Criteria

Figure A.7 O'Hare Subregion – Freight Land Uses with Proposed Level A Network



Source: CMAP, IDOT, analysis by Cambridge Systematics, 2017



## Appendix B. Stakeholder Comments on Draft Truck Route Network

The Draft Truck Route Network was presented to public and private sector stakeholders in March 2017. The majority of changes were recommended during the joint Technical and Policy Committee meeting on March 30, 2017 in Franklin Park with additional feedback received from individual municipalities and private trucking companies. A total of 52 comments were received and are aggregated in Table B.1 below. This table also includes any actions taken to address the comments or provides a rationale for why a change was not made.

**Table B.1 O'Hare Subregion – Draft Truck Route Comments and Recommended Changes**

Requested Change	Municipality	Agree/ Disagree	Notes
Change Franklin Ave. from B to C between Ruby St. and 25 <sup>th</sup> Ave.	Franklin Park	Agree	Downtown Franklin Park, businesses should not require large trucks; prefer through traffic to use Grand/Mannheim Rd. connection.
Add Pacific Ave. as a C	Franklin Park	Agree	Access to small business.
Make all of Seymour Ave. to IL 19 a B	Franklin Park	Agree	GIS boundary issue; revised.
Add Wolf Rd. between Belmont and Grand Ave. as a B	Unincorporated	Agree	Residential area, but heavily requested due to connection to Grand Ave. from warehouses in Franklin Park.
Make Biesterfield Rd. between Rohlwing Rd. and Meacham Rd. a D and make Nerge Rd. between Rohlwing Rd. and Meacham Rd. a C.	EGV	Agree	Biesterfield/Rohlwing/Nerge/Meacham Rd. connection proposed instead of direct westbound route on Biesterfield Rd. Proposed change due to better road characteristics (speed limit) for trucks on Nerge Rd. and larger set-back to school than on Biesterfield Rd.
Make Biesterfield Rd. between I-290 and S Arlington Heights Rd. a C	EGV	Agree	Elk Grove Village requested change to discourage through traffic in downtown. Large trucks will be able to reach medical facilities and Elk Grove Shopping Center due to reasonable access from I-290.
Make S Arlington Heights Rd. between Biesterfield Rd. and Thorndale Ave. a C	EGV/Wood Dale	Agree	Same as previous.
Make Prospect Ave. between Thorndale Ave. and IL 19 a C (continuation of S Arlington Rd.)	Wood Dale	Disagree	This route is the only way for large trucks to reach industrial facilities on Industrial Dr. from EOWA/Thorndale Ave.
Make York/Elmhurst Rd. an A. Southern boundary is E Green Rd. Northern boundary was not settled (options were Thorndale Ave., W. Touhy Ave., or W Golf Rd.)	Bensenville/EGV/Des Plaines	Partially Agree	Route provides both local and through connections between Mannheim Rd., CP Bensenville, IL 19, and Thorndale Ave. York/Elmhurst Rd. will remain a Level B north of IL 19. DuPage County reported working on Class II designation, which means



			that it will be available as a through route. South of IL 19 to Green Street will be designated Level A.
Make Green St. from CP Bensenville to York Rd. an A instead of a B	Bensenville	Agree	Provides connection between CP Bensenville and York Rd.
Make IL 19 from York Rd. to IL 83 an A	Bensenville	Disagree	This change would support a possible future connection between IL 19 and IL 83. This designation is not necessary with existing conditions.
Make Wolf Rd. between North Ave. and Lake Ave. a D instead of a C	Northlake	Agree	Requested by Northlake due to two schools on this road. Access to commercial uses is from North Ave. or Lake St.
Make private roads from North Ave. in to Walmart/Home Depot west of Wolf Rd a D from a B	Northlake	Agree	For consistency, will remove all private roads from the map instead of leaving as Level D.
Remove Bay Dr. and add Ketter Dr. and Hamilton Lakes Dr. as a C	Itasca	Agree	Roads will serve access needs in a business park.
Add IL 390 frontage roads as a C	Itasca/Wood Dale	Agree	GIS issue while the EOWA is under construction; revised.
Make Wood Dale Rd. south of Foster Ave. to IL 19 a D	Wood Dale	Disagree	There are a number of small businesses in this segment that require small truck access – should remain a C.
Make Washington St. a D from a B	Wood Dale	Agree	Misidentified as a B, all land uses on road are residential.
Clip Level B on Edgewood Ave. and N Central Ave. at Haynes Dr. instead of continuing to Foster Ave	Wood Dale	Agree	Discourage through traffic on these roads.
Change Wood Dale Rd. between Foster Ave. and Mittel Dr. from a B to a C	Wood Dale	Agree	Large truck access should be to/from EOWA.
End Devon Ave. "B" at N Mittel Blvd.	Wood Dale	Agree	GIS issue; revised.
Change Bauman Ct. from a B to a C	Wood Dale	Agree	Current land uses do not require large truck access.
Show Grand Ave. as a B to U.S. 20 Lake St. (outside study area)	Addison	Agree	Added connection to Lake St., IL 83, and I-290 via this corridor for continuity.
Remove all private roads from map – overarching comment	Des Plaines and Region-wide	Agree	Any private roads, other than those showing access to major intermodal facilities, will be removed from the map.
Add Orchard Pl. as a B	Des Plaines	Agree	Access to industrial/commercial land from Higgins Rd.
Remove B on Mt. Prospect Rd. south of Touhy Ave. (private road access to O'Hare)	Des Plaines	Disagree	Private road, but provides a connection to a major intermodal facility. Will remain a Level B to maintain consistency with other intermodal access roads.
Remove B on Patton Dr., W Johnson Rd., Upper Express Dr., and Lower Express Dr. as outside region	Des Plaines	Disagree	Shows connections to air cargo facilities. Recommend retaining to stay consistent with other areas.

Add Maple St. between Sherwin Ave. and Touhy Ave. as a B	Des Plaines	Disagree	School and community center located on southern segment of Maple St. and there is a center median preventing turns. Preference is for trucks to use Frontage Rd. and Birchwood Ave./Sherwin Ave. to reach facilities.
Add Oakton Pl., Western Ln. (first 50 ft.), Executive Way, Times Dr. as B	Des Plaines	Agree/Disagree	Agree with all except Western Ln. Access to restaurants should be off Oakton St. and adding Western Ln. creates a "dangling" Level B route that leads to a residential area.
Extend B on Miner St. to municipality boundary (currently stops at I-294) and close gap to Rand Rd.	Des Plaines	Agree	Provides access to businesses east of I-294.
Remove B on Lyman Ave. and E Prairie Ave. (make D)	Des Plaines	Agree	Access provided directly from E Dempster St.
Extend C on Ballard Rd. to municipality boundary (Potter Rd.)	Des Plaines	Agree	Provides network connectivity.
Add SE River Rd./East River Rd as a C	Des Plaines	Agree	Provides local connection to I-294 (NB only).
Remove B on E Roxbury Ln. and delete road	Des Plaines	Agree	Private road.
Remove Wieboldt Dr. and other private roads as B and delete roads around Sysco Chicago	Des Plaines	Agree	Private roads.
Add Thacker St. from S Wolf Rd. to Mannheim Rd. as a C	Des Plaines	Agree	Network connectivity and access to businesses immediately west of Mannheim Rd.
Add 1 <sup>st</sup> Ave. from Thacker St. to North Ave. (and small section of North Ave.) as a C	Des Plaines	Agree	Provides only access route to businesses on North Ave.
Disconnect Seegers Rd. and NW Highway and delete connection as a road. Change N Broadway St. to B to provide access	Des Plaines	Agree	Road being disconnected in 2017.
Disconnect Lee St. at S. River Rd. and delete segment as a road	Des Plaines	Agree	Road being disconnected in 2017/2018.
Remove C on Market St. and Metropolitan Way	Des Plaines	Agree	No freight activity on these roads.
Add C on Perry St. between Lee St. and S River Rd.	Des Plaines	Agree	Provide access to businesses in Des Plaines.
Add C on Prairie St. between Lee St. and Graceland Ave.	Des Plaines	Agree	Provide access to businesses in Des Plaines.
Remove C on Center St. and Pearson St. south of E Prairie Ave.	Des Plaines	Agree	Community land uses on these roads do not require truck traffic.
Add the following routes as "Local Trucks Acceptable" -Dempster St./Thacker St. from Elmhurst Rd. to Wolf Rd.	Des Plaines	Agree/Disagree	Des Plaines requested adding a new route level, in addition to Levels A through D, called "Local Trucks Acceptable." These streets would be exempt from the City's default weight limit for

<p>-Devon Rd. from Higgins Rd. to River Rd.          -Algonquin Rd. from Wolf Rd. to municipality boundary          -Mt. Prospect Rd. from Golf Rd. to U.S. 12          -Central Rd. from U.S. 12 to municipality boundary          -Wolf Rd. from Golf Rd. to municipality boundary (near Kensington Rd.)          -Busse Hwy. from end of "B" designation to municipality boundary          -Thacker St. from Lee St. to River Rd., Prairie Ave. from Lee St. to River Rd. and Pearson St. from Prairie Ave. to River Rd.</p>			<p>municipal streets (8,000 pounds or less) but are not intended to be designated as truck routes.          These roads will be added as Level C to indicate that any truck-related road investments will be targeted to smaller trucks and supporting local access rather than through movements by larger vehicles. Specific implementation rules or City ordinances may differentiate within the Level C routes as deemed appropriate by Des Plaines.</p>
Add S Access Rd. and W Cargo Rd. (off IL 19) as B	Bensenville/ Chicago Dept. of Aviation	Agree	Although the road is partially outside the study area, it connects truck routes in the participating municipalities to a key intermodal freight facility.
Add Taft Ave. (off IL 19) as a B	Franklin Park (S of IL 19)/Chicago Dept. of Aviation (N of IL 19).	Agree	Although the road is partially outside the study area, it connects truck routes in the participating municipalities to a key intermodal freight facility.
<b>Additional changes recommended by the Consultant Team</b>			
Add residential streets connecting IL 19 and IL 83 as a C (Spruce Ave., Brookwood St., Marshall Rd.)	Bensenville		Provides connection between IL 19 and IL 83.
Add York Rd. between Green and Grand Ave. as a C	Bensenville		Serves small businesses in corridor.
Add Green St. between S Mason St. and York Rd. as a C	Bensenville		Serves small businesses in downtown Bensenville.
Add Center St. between in Bensenville W Green St. and Main St. as a C2	Bensenville		Serves small businesses in downtown Bensenville.